Ethnicity in Archaeology
A case for Khirbet Kerak Ware in the Southern Levant

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Honours Thesis 2016
The University of Sydney
Abstract

Archaeological studies of ethnicity and identity have gained increasing momentum in the late 20th and early 21st centuries. This thesis is a critical examination of differing approaches to the interpretation of material culture in the detection of sociocultural identities. Theorisation in this field has often occurred in lieu of developing practical frameworks of analysis that are applicable to the material record. The lack of clarity arising from recurrent use of subjective concepts such as ‘ethnic identity’ and ‘archaeological subject’ without adequately defining these terms further hinders such studies. Instead, transparency and holism are paramount in considering archaeological identities due to the influential nature of the contexts in which the researcher and research subject are situated.

This approach is particularly pertinent in the study of Khirbet Kerak Ware, a handmade and highly burnished red/black ceramic occurring in a core morphological range in the Early Bronze III Southern Levant. Khirbet Kerak Ware differs in typology, decoration and manufacturing technique from other Southern Levantine pottery and does not demonstrate ceramic development in this region, indicating its foreign nature. Accordingly, trade, diffusion and migration have been proposed as possible mechanisms for the dissemination of Khirbet Kerak Ware. In particular, strong parallels have been noted between Khirbet Kerak Ware and the Kura-Araxes cultural complex of Anatolia and the Transcaucasus. This thesis provides insight into the Khirbet Kerak Ware phenomenon by investigating its origins and role within Southern Levantine society in a situational approach that aims to overcome many of the shortcomings of previous studies into archaeological ethnicity.
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Acknowledgements

I would like to thank my supervisor, Professor Alison Betts, for providing direction throughout my Honours year. Thanks also to Professor Barbara Helwing, for helping me find my bearings at the start of my thesis journey and familiarising me with new modes of interpretation.

Immense thanks must go to Melissa Kennedy, for taking my interest in archaeological ethnicity on board and first introducing me to Khirbet Kerak Ware. Without her initial input my thesis would not have been possible.

Thank you to Stephen Bourke for lending me his knowledge of the Southern Levantine Early Bronze Age and encouraging me to critically engage with my topic. Thanks also to Candace Richards, who allowed me to examine The Nicholson Museum’s collection of red black ware firsthand.

I would like to show my immeasurable gratitude to my partner, Yazan Kassisieh, for providing his computing know-how and supporting me throughout this year in countless ways.

Finally, I wish to acknowledge my family for fostering my passion for knowledge and guiding me through the numerous challenges that led to this achievement. Additional thanks to my sister, Nitara Zaid, for assisting me with her digital media expertise.
# Abbreviations

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<tr>
<td>ATC</td>
<td>Anatolia and the Transcaucasus/ Anatolian and Transcaucasian</td>
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<td>EBA</td>
<td>Early Bronze Age(^1)</td>
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<tr>
<td>ETC</td>
<td>Early Transcaucasian</td>
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<td>KA</td>
<td>Kura-Araxes</td>
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<td>KKW</td>
<td>Khirbet Kerak Ware</td>
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<td>MW</td>
<td>Metallic Ware</td>
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<td>NL</td>
<td>Northern Levant/ Northern Levantine</td>
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<td>RBBW</td>
<td>Red Black Burnished Ware</td>
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<td>RSBW</td>
<td>Red Slipped Burnished Ware</td>
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<td>SL</td>
<td>Southern Levant/ Southern Levantine</td>
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<td>TBS</td>
<td>Tell Beth Shean</td>
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<td>TBY</td>
<td>Tell Beth Yerah</td>
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\(^1\) Divided into Early Bronze (EB) I, II, III and IV phases.
Definitions

Burnish: the shiny exterior of a vessel that is achieved by polishing the hard surface of the pot with a stone or wood paddle².

Culture: the way of life and systems of knowledge that are shared by a society or group of people, encompassing beliefs, values, experience and other factors³.

Essentialism: the notion that certain categories have an intrinsic nature and innate characteristics regardless of contextual influences⁴.

Ethnic identity: an individual or group’s consciousness of their situationally defined perception of sociocultural difference that is symbolised by a range of variable cultural and behavioural traits to demarcate difference.

Ethnicity: the situationally defined perception of sociocultural difference held by members of a group, as constructed in opposition to people who are not part of that group in order to create a sense of belonging. This is symbolised by a range of variable cultural and behavioural traits that demarcate difference⁵.

Identity: an individual’s consciousness of the personal, social and cultural components of their being, which intersect to form a unique sense of personhood through ‘subjective self-definition’⁶.

Material culture: physically tangible components of culture, such as architecture, ceramics, and refuse.

² Stephen Bourke (University of Sydney, Near Eastern Archaeology Foundation), personal communication 2016.
³ Kidd 2002, 2.
⁴ Gelman 2005.
Petrofabric: the material that composes a vessel’s matrix, including naturally occurring components and additional tempers\textsuperscript{7}.

Pottery: a type of ceramic or ware, which has form and is composed of a fabric\textsuperscript{8}.

Sherds: broken pieces of a ceramic vessel\textsuperscript{9}.

Slip: mixture of finest clay particles and water that is applied in layers to the surface of a vessel\textsuperscript{10}.

Temper: non-plastic, coarse particles that occur in clay, either naturally or through addition by a potter\textsuperscript{11}.

\textsuperscript{7} Christie 2014.
\textsuperscript{8} Stephen Bourke, personal communication 2016.
\textsuperscript{9} London 2003a, 194-195.
\textsuperscript{10} Stephen Bourke, personal communication 2016.
\textsuperscript{11} Iserlis, Greenberg & Goren 2012, 319.
1. Introduction

The notion of ethnicity and ethnic identity is a growing area of archaeological investigation, as part of a wider trend within the social sciences. Ethnicity in archaeology is a nuanced concept, as the peoples who are subjects of such inquiries often existed in contexts that can no longer be directly accessed. As a result, archaeologists are required to formulate strategies for the detection of ethnic and other identities within the contexts they are studying. The primary movements in archaeological thought, culture-history, New Archaeology and post-processualism, each espouse differing methods for the archaeological examination of ethnic identity, which reflect their wider respective theoretical tenets.

Analysis of past and current strategies for the exploration of ethnicity in archaeology have shown that they are lacking in a manner of respects, primarily due to the significant emphasis that is placed on theorisation at the expense of the practical development of suitable and relevant frameworks for the study of ethnic identity in archaeological subjects. Although there has been growing recognition that the contexts of both the researcher and subject of research are crucial to the archaeological study of identities, and that ethnicity is a subjective notion, the manner in which such considerations are actively applied to creating workable frameworks of investigation remains severely underdeveloped.

In addition, the term ‘ethnicity’ itself has been criticised, along with concepts such as the ‘archaeological subject’, due to the historical tendency within archaeology to utilise such notions without providing adequate definition or investigating their connotations. Identification of these key issues, among others, has highlighted the fundamental need for theoretical concepts such as ‘ethnicity’ and ‘identity’ to be critically examined and utilised with transparency in the future, in a manner that is appropriate to the context in which they are being used.
1. Introduction

The current study attempts to address this need by considering notions of ethnicity, identity and culture through the case study of Khirbet Kerak Ware (KKW) in the Southern Levant (SL). KKW is a handmade, highly burnished ceramic, which generally presents in hues of red and/or black and can display incised or relief decoration. The vessels are generally found in the northern region of the SL, and occur in a range of forms, the majority of which are open styles. KKW is a particularly relevant case study through which to consider ethnic identity, as archaeologists are generally in agreement that this ceramic form is not indigenous to the SL, and does not display common features with other pottery from this area. The lack of a traceable SL ceramic predecessor for KKW has prompted many scholars to search elsewhere for the origins of this ceramic tradition, with close parallels in vessel typology and style being identified in the Kura-Araxes (KA) pottery repertoire of Anatolia and the Transcaucasia (ATC).

Trade, diffusion and migration are the predominant theories that have been proposed to explain the proliferation of KKW in the SL, and its distance from its most likely ceramic antecedent. The migration scenario refers to the southward migration either of potters or entire communities who participated in the KA cultural tradition. It is with this latter explanation that the notion of ethnicity is particularly pertinent, although questions of ethnic identity are also abundant within the investigation of KKW more broadly. Most existing examinations of KKW tend to perpetuate many of the broader problems that have been identified with considerations of ethnicity in archaeology, including reification of concepts without consideration of their meanings, and lack of contextualisation and holism in approaching this topic, making it essential that KKW is investigated from a new analytical perspective.

The first aim of this study is to examine the manner in which ethnicity and ethnic identity has been conceptualised in archaeology over time, and to highlight the limitations of current definitions of these notions. Following this, the second aim is to consider the case study of KKW through a theoretical framework which challenges many of the historical assumptions about ethnicity and ethnic identity that have been highlighted, in order to reconsider
this ceramic form from a novel standpoint. In doing so, the chronology, typology, decoration and manufacturing process of KKW is considered, and a comparison with other SL ceramic forms conducted. Key sites containing KKW and associated archaeological assemblages and artefacts are also investigated, with focus on contexts of discovery. This enables interpretation of the nature of KKW in the SL, and informs conclusions regarding its origins.

The provenance of KKW is then examined in relation to the KA cultural tradition and Red Black Burnished Ware (RBBW), which has continually been identified by scholars as the only plausible predecessor for SL KKW. Furthermore, evaluation of evidence for trade, emulation and migration is conducted to determine the mechanisms for the southward propagation of RBBW/ KKW. In doing so, the KKW ceramic repertoire is examined in a contextual and holistic manner that challenges past notions of the construction, perpetuation and definition of ethnicity and ethnic identities in archaeology. Accordingly, this study is a re-addressal of an area of scholarship that currently remains lacking in self-reflexivity, transparency, and practical applicability of theoretical frameworks.
2. Literature Review

2.1. An introduction to identity

Identity is a nuanced and multifaceted term that has been conceptualised differentially in accordance with the context in which it is utilised. Kidd (2002) highlights the three primary facets of identity as:

1. Individual identity, which is the unique sense of personhood possessed by each individual;
2. Social identity, which connotes collective belonging to a group or community through shared traits; and
3. Cultural identity, which is a sense of belonging to a distinct ethnic or cultural group.\(^{12}\)

Social and cultural identities are both types of group identity and often overlap in practice, as culture is an important aspect of social organisation.

In the late 20\(^{\text{th}}\) and early 21\(^{\text{st}}\) centuries there has been growing awareness of the personal nature of identity as founded in the consciousness of group members and non-members through ‘subjective self-definition’. This has resulted in a shift away from ‘objectivity’, where the researcher attempts to define cultural group traits, to ‘subjectivity’, in which the experiences of group members are brought to the forefront of investigations into personhood.\(^{13}\)

Rather than being a foundational category, identity is mutable and produced within specific historical and social conditions, with actors fluidly and differentially participating in social categorisations such as gender, class and ethnicity throughout their lifetimes on the basis of shared experiences and traits, which intersect to construct a sense of personhood.\(^{14}\)

\(^{12}\) Kidd 2002, 7.
\(^{13}\) Olsen & Konyliński 1995, 12; London 2003b, 146.
2. Literature Review

2.2. Defining ethnicity

Ethnicity is a component of both individual and collective identity that manifests through personal self-identification and social interaction\textsuperscript{15}. Ethnicity has been defined differentially at various points throughout time, with identification of its distinguishing characteristics often being more complex than that of other social identities due to the wide range of often contrasting approaches proposed for its detection. Furthermore, while a general consensus exists that ethnicity is a dual process of ascription by outsiders and identification by group members, such criteria are also applicable to other types of social groups\textsuperscript{16}. Although an exhaustive exploration of the varying connotations of ethnicity is beyond the scope of this thesis, such definitions will be succinctly considered within this literature review.

Current conceptualisations of ethnicity developed from social anthropologist Frederik Barth’s *Ethnic Groups and Boundaries* (1969). Barth perceived ethnic groups as self-defined, rather than objective entities, and argued that ethnicity must be analysed according to the perception of situations held by group members\textsuperscript{17}. He further challenged previous notions of the innate and static nature of ethnicity, embodied in the view that ethnic units were equivalent to cultural traits, instead stressing that ethnic identities are defined differentially and situationally, with individuals passing between categories of identity to advance interests or minimise loss\textsuperscript{18}. Additionally, Barth demonstrated the differing salience of cultural features in demarcating group boundaries, with diverse traits being actively employed to symbolise discrete group identities\textsuperscript{19}. Eriksen (1991) has argued for the viability of such formalist approaches to social identity, as they enable comparability of the cultural significance of ethnicity across contexts without conflating ethnic identities with ‘cultures’ or ‘peoples’\textsuperscript{20}.

\textsuperscript{15}Baltes 2001, 4827.
\textsuperscript{16}Emberling 1997, 300.
\textsuperscript{17}Barth 1969, 10-11; McGuire 1982, 160.
\textsuperscript{18}Jones 1997, 73-74; Baltes 2001, 4825; Vermeersch 2004, 23.
\textsuperscript{20}Eriksen 1991, 127-129.
However, Barth’s approach has been criticised for its overemphasis on the centrality of social interaction without adequately acknowledging the role of culture in ethnic identity. Furthermore, Emberling (1997) has suggested ‘difference’, rather than ‘group boundaries’, is a more appropriate analytical term to connote a phenomenon that occurs differentially both within and between groups, and includes overlapping group traits\textsuperscript{21}. Regardless, Barth’s ‘situational ethnicity’ has informed later studies by highlighting that ethnic identity must be investigated on a contextual basis that parallels the manner in which it is constructed, and has accordingly contributed to archaeological research into sociocultural identities in the past\textsuperscript{22}.

2.3. Identity in archaeology

Current archaeological interest into sociocultural identities emerged with the advent of post-processualism in the 1970s, emerging alongside wider global socio-political movements. Such studies have been largely concerned with the formulation of theoretical frameworks that aim to investigate archaeologies of difference, including ethnicity, gender and class, within various societies.

More recently, scholars such as Smith (2004) and Vermeersch (2004) have challenged essentialist conceptions of the archaeological subject and categorisations of difference, which assume the existence of stable and standardised terms of analysis without investigation of the mechanisms that create and reproduce difference within social and historical configurations. Smith (2004) argues that the “social fault lines” or axes of difference themselves should be examined to avoid perpetuation of the view that identities are oppositional and discrete. Furthermore, the ill-informed essentialist perception of the archaeological subject as depersonalised and dehistoricised must be challenged to encourage incorporation of artefactual contexts, rather than comparison of only material cultural traits\textsuperscript{23}. This growing self-reflexivity has prompted archaeologists to question the validity of applying contemporary markers of difference to past peoples, and highlighted the

\textsuperscript{21} Barth 1969, 15-16; Emberling 1997, 299-300; Baltes 2001, 4825.
\textsuperscript{22} Smith 2004, 3.
\textsuperscript{23} Smith 2004, 3, 7; Vermeersch 2004, 22.
2. Literature Review

necessity of investigating the manner in which research and representation in archaeology is conceptualised to avoid propagation of the historical assumption that such categories are intrinsic to all human societies. This is paramount as the projection of current facets of difference onto previous societies may limit the scope and validity of research by inaccurately assuming the operation of certain sociocultural mechanisms in the past\textsuperscript{24}.

A key criticism of the study of identity in archaeology is derived from the question of whether archaeologists can detect ideas in the material record, or only past behaviours that accumulate to produce archaeological assemblages. Hodder (2000) and other post-processualists have argued that archaeologists are able to reconstruct ideas from material culture, but that this does not necessarily represent the thoughts of past peoples, and that although such reconstructions are not archaeologically verifiable, supporting evidence can strengthen them\textsuperscript{25}. An additional difficulty specific to the study of ethnic identity is determination of the extent to which similarities and differences in material culture can be correlated to variations in population, as opposed to other markers of difference\textsuperscript{26}. Accordingly, knowing the limitations of the archaeological record, it must be contextually determined if questions of ethnicity are appropriate and convincingly demonstrable\textsuperscript{27}.

2.4. Archaeological origins of ethnicity

Primordialism and instrumentalism are the two primary archaeological viewpoints for the origins and production of ethnicity. Primordialism is exemplified in Keyes’ (1976) ‘Towards a New Formulation of the Concept of Ethnic Group’, and is founded on the conception of cultural traits as innate, involuntary, and ascribed at birth from the coercive nature of kin. Accordingly, ethnicity is distinguished from other social identities through its ability to transcend social relations\textsuperscript{28}. However, primordialism has been criticised for its lack of explanatory ability regarding why such traits are coercive; its neglect of

\textsuperscript{24}Jones 1997, 65, 72; Meskell, 2001, 188-189.
\textsuperscript{25}Hodder 2000, 86-96.
\textsuperscript{26}Trigger 1977, 21-23.
\textsuperscript{27}Stephen Bourke, personal communication 2016.
2. Literature Review

the fluid, socio-structural and contextual nature of ethnic identities; and the adoption of an ahistorical approach to explain a situationally defined phenomenon.

Whilst primordialism is constructed as a psychological explanation of ethnicity, instrumentalism is concerned with the influence of economic and political factors on how ethnicity is embedded in and mediates social relations, with particular focus on negotiation of access to resources. The analytical focus of theoretical approaches classified as instrumental encompasses the entire subjectivist-objectivist spectrum and perceive ethnicity as contextually contingent and variable, with Barth’s ‘situational ethnicity’ being an archetypal example of this framework\(^{29}\). Instrumentalism has been criticised for its reductionism and determinism, as economic and political factors alone do not determine the experience of ethnicity, and also for its overemphasis on structural factors whilst disregarding cultural and psychological dimensions. Although instrumental frameworks enable comparative analysis of ethnic groups and situational elements pertaining to boundary maintenance, such approaches falsely assume homogeneity of group interests and fail to explain the generation and perpetuation of ethnic groups\(^{30}\).

The polarity and lack of individual robustness in primordialism and instrumentalism has prompted attempts to reconcile these approaches into a single theory of ethnicity. Most integrated theoretical approaches assert a primordial basis for ethnicity that is situationally influenced, with some theorists contending that ‘primordial’ cultural traditions can change in response to altered social and political conditions, resulting in differential manifestations of ethnicity over time\(^{31}\). Despite this, current frameworks do not transcend the existing theoretical dichotomy, but rather perpetuate it through the use of redundant terminology and concepts\(^{32}\). Instead, ethnicity can be perceived as an aspect of every individual’s identity without reifying primordial viewpoints in the same manner that structural and social aspects of

\(^{32}\) Jones 1997, 82.
ethnicity should be acknowledged without deeming political and economic factors as the sole influences in the construction and maintenance of ethnic identities\textsuperscript{33}.

2.5. The role of material culture

Material culture is an enduring expression of behaviours, ideas and values in the past, and the primary means through which identity in archaeology is investigated\textsuperscript{34}. The interpretation of archaeological assemblages is influenced by both intentional and unintentional actions occurring during object use, after deposition, and during post-excavation analysis, with each phase contributing to the manner in which an artefact is perceived and the meanings it conveys\textsuperscript{35}. Accordingly, excavation and analysis of material culture is based on subjective interpretations and must be broadly contextualised in order for meanings to be validly extracted\textsuperscript{36}.

2.5.1. Culture-History

Material culture and its position within past societies has been conceptualised differentially over time. Culture-historical archaeology emerged out of the growing awareness of human difference that accompanied imperialism and colonialism in the 19\textsuperscript{th} century, which viewed ethnic groups as biologically and culturally discrete, and conflated race, language and cultural elements with one another. This resulted in the perception of material culture as stable and static, meaning that changes in archaeological assemblages were interpreted as the influx of new peoples who were accompanied by their own distinct artefactual repertoires\textsuperscript{37}.

Culture-history attempted to correlate historically attested groups with material remains to create ‘archaeological cultures’, which Childe (1929) defined as the frequent occurrence of certain elements of material culture in association with

\textsuperscript{33} Baltes 2001, 4827.
\textsuperscript{34} Buchli 1995, 191.
\textsuperscript{35} Criado 1995, 196.
\textsuperscript{36} Richards 1995, 218; Ross 2012, 39.
\textsuperscript{37} Shennan 1991, 30; Olsen & Kobylinski 1995, 9.
one another, as represented by diagnostic artefacts\textsuperscript{38}. More recent recognition that diverse factors influence the production of cultural elements has resulted in the criticism of this term for its implication that cultures are equivalent to material objects\textsuperscript{39}. Håland (1977) and Hodder (1979) have highlighted that similar manufacturing techniques may produce different forms of material culture due to variations in raw materials, whilst objects that appear similar may have been manufactured differently\textsuperscript{40}. In addition, different ethnic groups may display a similar material culture, whilst the same ethnic group may possess diverse material culture in an ecologically variable environment\textsuperscript{41}. This contradicts the culture-historical assumption of ethnic groups as homogenous, unchanging and discrete, and has prompted further investigation into archaeological ethnicity.

### 2.5.2. New Archaeology

The problematic conceptualisation of social identities within culture-historical approaches contributed to the development of New Archaeology in the late 1950s, which perceived the archaeological record as an objective reflection of human behaviour in which culture was an ecological adaptation\textsuperscript{42}. As exemplified in Binford’s (1962) ‘Archaeology as Anthropology’, processualists viewed ethnic and other social identities as interest groups that systemically employed material culture to express and reinforce social relationships to gain economic or political advantage\textsuperscript{43}. Binford argued that all objects could be categorised into three functional subsystems, and that their distribution between these categories would provide insight into the social organisation within societies and the nature of interaction between groups, reflecting the total system in which material culture operated. Furthermore, Binford contended that these categories were intersected by formal or stylistic characteristics, which where not directly related to the function of the artefact but rather were

\textsuperscript{38} Childe 1947, 81; Jones 1997, 15-18, 24-25.
\textsuperscript{39} Wendorf, Marks & Shiner 1977, 23.
\textsuperscript{40} Using ethnographic research, Hodder's ‘Economic and Social Stress and Material Culture Patterning’ (1979) demonstrates the manner in which ethnic groups develop differentially in ecologically variable climates.
\textsuperscript{41} Sackett 1977, 373; Hodder 1979, 452; Håland 1997, 28.
\textsuperscript{42} Olsen & Kobyliński 1995, 10; Thomas 1996, 58.
\textsuperscript{43} Hodder 1979, 448.
mechanisms for promoting group solidarity and identity through the manufacture of social distinctiveness, and that the investigation of such attributes would enable questions regarding ethnic origin, migration and inter-group interactions to be studied\textsuperscript{44}.

Sackett (1977) extended Binford’s classification to theorise that every object participates in all three functional spheres simultaneously but can be primarily designated to one, depending on its utilitarian nature\textsuperscript{45}. Clark (1977) has further argued that stylistic or typological variation can provide abundant data about production, consumption and discard activities performed at a particular site, rather than directly indicating the presence of specific ethnic identities or social relationships. Instead, patterns can be constructed from the available material evidence, through which information regarding social identities can be inferred and interpreted\textsuperscript{46}. Accordingly, the functionality of material culture is central to New Archaeology, with the dichotomy between style and function contributing to the variability of artefacts within the archaeological record and enabling behaviours and trends to be detected.

\textbf{2.5.3. Post-Processualism}

More recently, post-processualism has challenged New Archaeology’s perception of culture as purely adaptive through the recognition that material culture is actively utilised and altered by people, and that social identities are embedded within objects\textsuperscript{47}. Post-processualism views the archaeological record as a ‘text’ that can be interpreted through attention to wider frameworks of meaning\textsuperscript{48}. Investigation of specific sociocultural contexts is necessitated due to the contextually contingent nature of social identities, which are informed by the wider social structure in which they are embedded, and enables essentialist notions of identity formation to be avoided. Ethnicity,

\textsuperscript{44} Binford 1962, 218-220. The functional subsystems Binford identified were technomic, ideotechnic and socio-technic, and pertained to technology, ideology and society respectively.

\textsuperscript{45} Sackett 1977, 370-372. Sackett argued that utilitarian objects largely belonged to the technological sphere, whilst non-utilitarian objects operated in the social or ideological spheres.

\textsuperscript{46} Clark 1977, 19-20.

\textsuperscript{47} Edwards & McCollough 2007, 59.

\textsuperscript{48} Thomas 1996, 59.
in particular, experiences shifting salience due to changes in the context in which it exists and its importance to members of society\textsuperscript{49}. Accordingly, the study of ethnicity must aim to reconstruct the manner in which members of a society perceived one another, rather than through the ascription of archaeological perspectives by researchers\textsuperscript{50}.

Hodder’s (1994) theory of symbolic archaeology provides a framework for the interpretation of symbolic meanings in material culture on the basis of object function and how artefacts convey information about value systems within particular, historically situated societies\textsuperscript{51}. Hodder argues that the term ‘contextual’ encompasses all levels of meaning held by objects as it refers to the environmental and behavioural whole in which an artefact is embedded and interpreted. Accordingly, objects that are removed from their spatial and temporal framework become “mute”\textsuperscript{52}.

Contextual analysis involves the identification of statistically or qualitatively meaningful patterning through similarities and differences in material culture, as determined through reconstructions of sociocultural systems. The importance of context to the interpretation of material culture and social interactions is crucial as the choice, whether intentional or subconscious, of which objects symbolise social categories occurs within a cultural matrix, with artefacts only operating in cultural contexts in which they hold meaning and are deemed appropriate\textsuperscript{53}. Accordingly, material culture must be interpreted according to its own hermeneutic, with each groups’ set of meanings and values being determined by culturally specific codes and circumstances\textsuperscript{54}.

\textsuperscript{49} Jones 1997, 44, 75-81; Smith 2004, 12.
\textsuperscript{50} Eriksen 1991, 130.
\textsuperscript{51} Hodder’s theory of symbolic archaeology is encapsulated in his work ‘The Contextual Analysis of Symbolic Meanings’ (1994), where he proposes a three level hierarchy for the meaning of cultural objects: (1) how the object was used and conveys information about individual, social and cultural characteristics; (2) the meaning of the object due to its position as part of a code, set or structure; and (3) the content of meaning, involving the historical context of changing ideas and associations in relation to the object itself.
\textsuperscript{52} Hodder 1994, 1-2.
\textsuperscript{53} Kimes 1982, 114; Hodder 1994, 6-7.
\textsuperscript{54} Hodder 2000, 86-87.
This is further embodied in Hodder’s (1993) analogy between material culture and literary devices, which asserts that narrative and rhetoric are not only tools for interpreters, but were also incorporated into sociocultural structures and expressed the values and identities of those who constructed and consumed such objects. In this view, material culture acts similarly to plot within a narrative and cannot be interpreted without knowledge of the wider sociocultural and temporal context in which it is embedded, and where it is assigned meaning through interaction with individuals in accordance with symbolic codes and structures, paralleling literary devices such as rhetoric or irony\(^55\). As a result, material culture functions as a multidimensional ‘text’ that is interpreted through frameworks of meaning from its context of origin\(^56\).

2.6. Artefacts as active participants in social systems

The necessity of contextualisation and historically specific approaches identified through post-processualism has fostered the development of novel approaches to conceptualising existing notions of identity. Eriksen’s (1991) ‘language-game’ analogy reinforces the importance of context through the proposition that each society functions in accordance with a learned and internalised code of temporally and spatially prescribed meaning that is related to other language-games or societies through shared factors such as practices, people or other communicating elements\(^57\). This framework enables the extent of culturally shared meanings to be demarcated without assuming the existence of an integrated culture or two completely discrete groups, with codes of meaning within language-games being continually modified by participants and ascribing meaning to material culture whilst also being influenced by such objects.

This notion of material culture as actively engaged in the production and perpetuation of sociocultural identities reflects a wider archaeological trend where objects are perceived as active bearers of agency, rather than passive reflections of ideals from their cultures of origin\(^58\). Jones’ (1997) theory of the

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\(^{55}\) Hodder 1993, 274, 280; Thomas 1995, 211; Ross 2012, 38.

\(^{56}\) Tilley 2000, 425.

\(^{57}\) Eriksen 1991, 127-129.

2. Literature Review

‘habitus’, as adopted from Bourdieu (1977), embodies this notion in a manner applicable to archaeological studies of ethnicity and social identity. The ‘habitus’ denotes that new experiences are organised in accordance with structures produced by past experiences, which Jones argues bridges the chasm between subjectivism and objectivism in the archaeological study of identity. This framework asserts that existing material culture actively influences the manner in which objects in a society were produced and consumed in the past, but posits that there is also the potential for innovation and change as a result of social interaction or other factors, creating multiple and differential object meanings.

2.7. Detecting ethnicity in the archaeological record

As examined throughout this literature review, much scholarly focus has been devoted to the theoretical development of frameworks through which to conceptualise ethnicity and other social identities in the past. However, methodological approaches to detecting ethnicity in the archaeological record must also be considered in order for such frameworks to be practically applicable to material culture.

2.7.1. Object Biography Theory

Recognition of the polysemic nature of material culture and its shifting affiliations is increasingly being favoured over traditional notions of artefacts as holding objective or unitary meanings. Material culture does not reflect single meanings or “truths” from past societies, but rather relies on the subjective interpretation of implicit and explicit meanings by the archaeologist, which is influenced by various contexts including the investigator’s own, and can result in the derivation of meanings that may have been unintended by the producers of an object.

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62 Richards 1995, 88, 94.
Kopytoff (2000) has proposed an object biography approach to studying material culture that takes into account the multiplicity of shifting meanings, origins and identities that an object encompasses. His framework involves constructing a biography of objects in a similar way to that of people, accounting for questions of provenance, status and change. This highlights the parallel manner in which societies constrain and construct both objects and people, with the shifting context and spheres in which an object operates continually reinforcing and redefining its meaning. This approach is particularly relevant to archaeology as it provides a practical framework for interpreting material culture and challenges rigid object categories. Human and object identities consist of the situational intersection of temporality and spatiality, and are defined by their interactions with one another, with objects having the ability to influence the identities of people in the same manner that people can impact the identities of objects.

**2.7.2. Material correlates**

Although there has been much criticism regarding the detection of markers of ethnicity within material culture, many archaeologists assert that artefacts can be linked to particular cultural traditions and social identities, and that their use by varying ethnic groups can result in subversion or re-contextualisation of the identities with which they are associated. Proponents of this approach have argued that the discipline of archaeology itself is the study of material correlates of human behaviour, which encompasses all dimensions of culture including identity.

When utilising material correlate approaches, archaeologists must identify the salience of cultural features independently for each social situation and avoid the assignation of cultural identities to entire artefactual assemblages due to the differential manner in which meanings were constructed on the basis of variations in context. Artefacts should be studied in regard to forms, activity

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63 This theory is outlined in Kopytoff’s (1986) ‘The Cultural Biography of Things’.
67 Emberling 1997, 311.
areas and origins in order to determine the manner in which they were engaged in human interaction and cultural patterns\textsuperscript{68}. This is a particularly difficult task, as it cannot be assumed that certain types of evidence are direct markers of a certain ethnic identity, or that universal markers of social identities exist across contextually varied cultures\textsuperscript{69}.

Emberling (1997) suggests that the social and geographical boundaries of groups must first be identified through comparison of distinctive practices or artefacts and production and use contexts, which can potentially denote ethnic difference. He further proposes that social boundaries are likely to be marked by redundant features, although classification of redundancy is problematised by theoretical issues and differential preservation, which complicate the identification of meaningful social difference. In addition, prominent stylistic boundaries do not necessarily denote a single social identity, but may encompass multiple identity groups or groups with intersectional identities, with consideration of the nature of production, distribution, and wider issues of context being necessary\textsuperscript{70}.

Despite acknowledgement of ethnicity as flexible and malleable, Emberling (1997) and Grantham (2007), amongst others, have suggested that certain aspects of material culture are more likely to denote ethnic identity than others, due to the social value and centrality of these activities in everyday life. The prominence of household structure, ritual and mortuary practice, and foodways has been proposed as notable. Food refuse is particularly salient as a marker of social difference due to its archaeological ubiquity and the tendency of people to resist change in their methods of procuring, preparing and consuming foods. Although some malleability exists within food practices, as with all cultural identifiers, archaeological, ethnoarchaeological and anthropological studies have demonstrated the diversity of nourishment practices, which operate as symbols of cultural identity and group solidarity in specific contexts\textsuperscript{71}.

\textsuperscript{68} Ross 2012, 47.
\textsuperscript{69} Edwards & McCollough 2007, 5; Frangipane 2015a, 9182.
\textsuperscript{70} Emberling 1997, 311, 318-319, 324.
\textsuperscript{71} Emberling 1997, 325; Grantham 2007, 279-280.
Additionally, the role of ceramics in the establishment and negotiation of sociocultural boundaries indicates it may be another pertinent marker of cultural difference. A high level of behavioural diversity has been detected by ethnoarchaeological studies within ceramic societies, which reflect variable identities and cultural patterns associated with production, use, and inter- and intra-group social interaction. ‘Ceramic sociology’ has recognised that although style is distinct to a particular context, the decisions underlying style are socially transmitted, with the level of similarity between ceramic typologies potentially depending on the frequency of social interaction between relevant groups. The use of ceramics as a marker of ethnicity assumes the salience of pottery decoration in its ability to communicate information about the identities of interacting peoples in a manner that functional aspects of material culture do not. However, the discovery of a certain form of pottery at a site does not indiscriminately indicate the presence of an associated ethnic group, as factors aside from population movement can also result in the geographical distribution of ceramics.

Discussion regarding appropriate markers of identity is often derived from the notion that some artefacts are more “authentic” signifiers than others. However, such a perception is potentially problematic due to the differential manner in which objects are imbued with meaning, and consideration of individual artefactual circumstances is essential to their interpretation. Dever (2007) has proposed a holistic scheme for utilising material culture to discern ethnic difference, which takes into account numerous factors including environment and settlement structure, demography, technology, subsistence, mortuary ritual, and social organisation. He argues that although these are modern categorisations, past peoples would have recognised the differences that such traits reflect, particularly in comparison to other groups. Other archaeologists have similarly argued that past peoples may be plausibly correlated with artefactual evidence if the full archaeological context is considered, including

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72 Hegmon 2000, 129-133.
73 Sackett 1977, 377.
74 London 2003b, 148. See also Chapter 6. Origins of Khirbet Kerak Ware.
75 Upton 1996, 2.
76 Dever 2007, 53.
relationships between various elements of material culture and the manner in which people engaged with them\textsuperscript{77}. Accordingly, the manifestation of several factors, both artefactual and behavioural, may indicate the presence of a particular sociocultural identity\textsuperscript{78}.

2.8. The importance of context

As has been recognised throughout this literature review, consideration of context is vital to the detection and interpretation of ethnic identities in the archaeological record. Along with the framework of meaning in which the subject of study operated, the contexts of researchers themselves often influence interpretations of material culture\textsuperscript{79}. Two emerging fields in the archaeological study of identity demonstrate the importance of examining the contexts in which investigators of material culture are situated\textsuperscript{80}. The first, emancipatory or recuperative archaeology, is the study of those who have been oppressed or silenced in the past and has been used to facilitate reconnection with land and recognition of heritage as part of post-colonial reparations\textsuperscript{81}. In contrast, anti-nationalist cosmopolitan archaeology emphasises the commonality of all people through a shared past in an attempt to counteract the negative use of archaeology for political agendas\textsuperscript{82}.

Emancipatory and cosmopolitan archaeology are reflective of wider modern political discourses that have influenced the development of these fields of study. Both forms of archaeology perpetuate essentialism, the former through the assumption that modern axes of difference are universal categories, and the latter through its utilisation of the essential archaeological subject. However, if these categorisation schemes and units of analysis are scrutinised, the investigative scope of these research areas will be broadened and their

\textsuperscript{77} Clark 1977, 20.
\textsuperscript{78} London 2003b, 147.
\textsuperscript{79} Jones 1997, x-xii; Hodder 2000, 88.
\textsuperscript{80} Hodder 1994, 2, 9.
\textsuperscript{81} Emancipatory archaeology focuses on disenfranchised groups, including enslaved peoples or dispossessed indigenous groups, in an effort to foster the reparation process.
\textsuperscript{82} Smith 2004, 11-12. The utilisation of archaeology for the achievement of socially undesirable political aims has occurred throughout the historical period in a range of national and geographic contexts.
relevance to the development of archaeological theory enhanced\(^{83}\). In addition, both fields demonstrate the highly influential manner in which the contexts of researchers permeate their research methodologies and resulting interpretations of material culture, and the subsequent necessity of self-reflexivity in studies of the past\(^{84}\).

### 2.9. New frameworks of analysis

Ethnicity as a facet of sociocultural identity has evidently been conceptualised differentially over time, both in archaeology and more broadly. Although increasingly complex theoretical conceptualisations of ethnicity and its relationship with material culture are being developed within archaeology, much discussion continues to occur regarding the most appropriate manner in which to address notions of ethnic identity in the past. Disjuncture often occurs between theoretical principles and analytical practice, the latter of which remains underdeveloped\(^{85}\). This is seen in the need to investigate essentialist notions such as the archaeological subject and axes of difference, which is necessary for theoretical advancement of the discipline. In addition, further scope exists for the development of practical frameworks to address social identities within archaeology, which incorporate the central theoretical elements that have been discussed to formulate a robust approach.

Although the current study cannot entirely address these shortcomings within the state of archaeological research, it attempts to contribute to this field through exploration of the notion of ethnic identity and methods for its detection in the examination of KKW and associated material remains as a case study approach. This study is a synthesised reconsideration of KKW which espouses the contextually contingent and fluid nature of ethnic identities, and the active manner in which both people and artefacts possess agency in their interactions with one another, creating a multiplicity of varying meanings. By closely investigating the KKW tradition in the SL, this thesis innovatively re-examines an existing body of evidence to address the

\(^{83}\) Jones 1997, x-xii; Povinelli 2001, 325; Vermeersch 2004, 27.

\(^{84}\) Richards 1995, 88, 94.

\(^{85}\) Smith 2004, 11-12; Vermeersch 2004, 22.
identified disparity between theory and practice that often occurs in archaeological studies of ethnic identity. Although the approaches espoused here will not be wholly transferrable to other archaeological assemblages, analysis of existing literature has demonstrated that such a specific, contextual approach is required to adequately investigate notions of ethnicity. Accordingly, this study contributes to the wider field of literature and addresses an identified need in current research into archaeological identity through examination of the KKW phenomenon, which has notions of ethnicity at its core.
3. Methodology

3.1. Theoretical analysis

The methodology for this thesis consists of two components, the first of which is a theoretical analysis conducted within the Literature Review section. It explores the concepts of identity and ethnicity in archaeology in order to provide a conceptual framework that will inform the remainder of the thesis. Considerations of the definition and connotations of identity and ethnicity, both in archaeology and more broadly, have highlighted the lack of transparency in the utilisation of these terms. In addition, identification of the problematic nature of most applications of ethnicity to the archaeological record situates the current study within the wider framework of research into this topic. Examination of the link between ethnicity and material culture, which takes into account perspectives from culture-historical, processual and post-processual modes of thought, has highlighted the necessity of contextual and holistic approaches to studying ethnic identities in the past. Taking these crucial elements into consideration, the current study attempts to bridge the gap between archaeological theory and practice in an approach that has been identified as greatly lacking in current archaeological literature.

3.2. Case study

This theoretical component provides the disciplinary context for the following case study of KKW. The origins of KKW and associated ethnic identities have been a prominent feature in studies of this ceramic style. Accordingly, the preceding examination of ethnicity and identity in archaeology is imperative in order for the case study to be appropriately situated within and informed by wider theoretical frameworks. Through consideration of KKW and associated material evidence, aspects of Object Biography Theory and the material correlate approach are utilised in order to develop a holistic biography of the ceramic type, taking into account its form, distribution and origins. In this manner, KKW is considered as an active participant in the social systems in
3. Methodology

which it existed, influencing the identities of those who interacted with it, whilst also operating as a facet of such identity.

KKW has been mentioned in passing, as well as studied in greater detail, throughout the 20th and 21st centuries. However, such research has either considered KKW in terms of a specific aspect, such as the primary analysis of one archaeological assemblage, or simply provided a brief overview of the ceramic in compilations on the Early Bronze Age (EBA) SL. In contrast, this thesis provides a synthesis of KKW and interpretations of its implications for the ethnic identity of consumers and producers by considering both its context within the SL and theories of provenance. Accordingly, the current study provides a holistic overview and analysis of the KKW phenomenon, whilst other authors, due to their more detailed and specific scope, tend to focus on certain elements of material culture without adequate consideration of wider societal context.

Many scholars have identified this situational case study approach as necessary in the archaeological field of social identities, particularly ethnicity. Furthermore, analysis of the shortcomings of previous studies examining archaeological ethnicity has fostered an element of reflexivity within the current study that will address some of the identified limitations of past research.

3.3. Limitations and biases

As a result of the limited timeframe that is the nature of an Honours thesis, and accompanying constraints on the depth and scope of research conducted, this study has a number of shortcomings. Although the problematic nature of the concept of ethnicity has been explored in depth throughout the Literature Review, the terms ‘ethnicity’ and ‘ethnic identity’ are employed nonetheless as there is not adequate scope to create new, potentially more appropriate, terms of analysis. To counteract the difficulties that may arise from this, the terms ‘ethnicity’ and ‘ethnic identity’, amongst
3. Methodology

others, have been defined in the context of this study to ensure transparency in their meanings and utilisation\(^{86}\).

In addition, it must be acknowledged that our current conceptualisations of ethnicity may be dissimilar from or more nuanced than those that existed in the past due to the different contexts in which past peoples were situated. As a result, the theoretical concepts being applied in this study may have held different definitions or not existed previously. Despite this, notions of trade, diffusion and migration, which are central to the study of KKW and archaeological ethnicity more broadly, would have been applicable in some form or respect in the past. Accordingly, this study will attempt to consider these forms of social agency and other aspects of ethnicity in a manner that does not assume universal meaning of such notions and of ethnic and other sociocultural identities\(^{87}\).

Furthermore, as highlighted, the individual contexts of researchers influence the manner in which they interpret available evidence. A primary limitation of this study is that the material evidence being considered cannot be directly accessed, and accordingly the methodology being employed is reliant on the synthesis and analysis of existing interpretations of KKW and associated questions of origins and ethnic identity. As a result, the interpretations in this study may be biased by not only my own context, but also the contexts of researchers previously considering KKW. The influence of others’ interpretations is particularly pertinent in regard to ceramic typologies and terminologies, as the use of different terms to describe the same features or similar descriptions of contrasting vessels problematise my own characterisations of KKW\(^{88}\). These elements of subjectivity, and the contrasting aims of the works being drawn upon, complicate the interpretive process in the current study.

\(^{86}\) See Definitions.
\(^{87}\) Povinelli 2001, 325; Smith 2004, 11-12.
\(^{88}\) Dessel & Joffe 2000, 41.
3. Methodology

Despite the identified shortcomings, this study will challenge the essentialism that has permeated many archaeological studies of ethnicity and identity in the past by situating KKW within its broader historical context in a holistic and personalised manner that takes into account wider avenues of evidence. Analysis and interpretation of the material record will provide the basis for examining KKW and its origins through a situational and context-appropriate framework, rather than with preconceived notions of ethnic identities or ‘archaeological cultures’ associated with this ceramic form, as has been a limitation of previous studies of ethnicity in archaeology. Accordingly, this reflexive and transparent approach to KKW will enable questions regarding its origins and the identities of its producers and consumers to be considered in a situational manner that challenges previous essentialist, binary and static perceptions of ethnicity in the past.
4. Khirbet Kerak Ware in the Southern Levant

4.1. Introduction

KKW is a handmade red-black burnished ceramic style that appears in the EBA SL and is historically associated with the EB III period. William Foxwell Albright first discovered KKW in his 1926 survey of the site of Tell Beth Yerah (TBY), also known as Khirbet el-Kerak (“the ruins of the castle”), from which the pottery name is derived. KKW appears in a range of diagnostic typological and decorative forms. Its producers demonstrate adaptability to their ecological and socio-political environment, and utilise manufacturing techniques that are replicable in diverse locations. This tendency for flexibility has resulted in the lack of standardisation that has been observed in KKW. It differs from other SL EBA pottery forms not only in typology and decoration, but also manufacturing technique and chronology, as KKW does not demonstrate regional ceramic development from previous EBA periods. This has prompted suggestions that KKW is not indigenous to the SL, but rather is a foreign pottery tradition that may have appeared in this area through migration, trade or diffusion of ideas.

4.2. Chronology

Although KKW is predominately associated with the EB III, understanding of the overall EBA is required to interpret KKW within its wider regional context in the SL. The EB II, which is generally perceived to precede the appearance of KKW, differed from the earlier village-based EB I through a decline in ceramic regionalism in favour of increasing homogenisation in SL pottery. This cultural convergence has been detected in the material culture, architectural features and religious ideology of the EB II, and was accompanied by growing social complexity and political organisation.

89 Albright 1949, 76; Maisler, Stekelis & Avi-Yonah 1952, 165.  
90 Greenberg 2001, 46; Iserlis 2009, 188; Bolger, Greenberg, Kroll & Palumbi 2014, 149.  
However, towards the end of the EB II, a ‘settlement crisis’ is believed to have occurred, which resulted in extensive changes within the SL urban landscape\(^{92}\). This culminated in the abandonment or destruction of many sites, some of which were resettled whilst others were not\(^{93}\). The unstable nature of the late EB II may have provided a context in which new groups of people were able to enter and settle in this region, and additionally prompted the local SL peoples to be more receptive to new and innovative ways of life, by encouraging flexibility of cultural characteristics and identities\(^{94}\). In addition, the emergence of a more open and sparse landscape would have provided opportunities for new groups to occupy these ‘gaps’\(^{95}\).

Following this, the EB III is associated with the presence of KKW in the SL, which accompanies a reduction in site numbers and sees the concentration of populations into fewer and increasingly fortified settlements\(^{96}\). A number of subdivisions have been proposed for the EB III on the basis of ceramic and associated archaeological evidence. Albright (1949), who first recognised the importance of KKW in EBA SL chronology, suggested that the EB III should be divided into: (a) pre-KKW; (b) a KKW phase; and (c) the decline and disappearance of KKW. However, his subdivisions have been discounted on the basis of more recent evidence that demonstrates the presence of KKW in his final chronological phase\(^{97}\).

Using more recent evidence, Getzov, Paz and Gophna (2001) have suggested a similar chronology to Albright where EB IIIA predates KKW and is characterised by a similar ceramic repertoire in the NL and SL, whilst the ubiquitous appearance of KKW is assigned to the following EB IIIB period, with the final EB IIIC phase marking the disappearance of KKW from the

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\(^{92}\) Richards 2003, 290-291. Richards argues that the reassertion of Egyptian dynastic authority over the Sinai resulted in the loss of SL control over copper and turquoise mines and may have contributed to this ‘settlement crisis’.

\(^{93}\) Getzov, Paz & Gophna 2001, 28-29.

\(^{94}\) Emberling 1997, 325; Grantham 2007, 279.

\(^{95}\) Greenberg 2007, 258.

\(^{96}\) Ben-Tor 1992, 96, 122; Philip & Baird 2000, 9; Richards 2003, 291.

\(^{97}\) Albright 1949, 71; Esse 1991, 67.
archaeological record\textsuperscript{98}. In contrast to this three-part division, Wright defines the EB III on the basis of the introduction of KKW\textsuperscript{99}. Hennessey (1967) and Callaway (1977) have further adopted this association to delineate the EB IIIA and IIIB phases through their respective archaeological investigations at Ai and Tell es-Sultan, where both phases are marked by the presence of KKW\textsuperscript{100}. However, Esse (1991) has highlighted that this dual division is not universally applicable to all EB III SL sites\textsuperscript{101}.

Relative chronology using local pottery sequences and comparable Egyptian Dynastic pottery types from historically attested contexts assigns the EB II to c. 3000-2700 BCE. In this ‘high chronology’, the EB III commences parallel to the Egyptian Old Kingdom, c. 2700 BCE, and ends c. 2350-2300 BCE\textsuperscript{102}. Ben-Tor (1992) and Philip (2000), amongst others, have previously accepted this start date for the EB III\textsuperscript{103}. Additionally, Ben-Tor has assigned EB IIIA to c. 2700/2650-2550 BCE and EB IIIB to c. 2550-2350 BCE, arguing that the post-KKW phase should be considered as EB IV rather than a component of the EB III. During the transitional EB IV extensive changes are believed to have occurred in the SL, including the disappearance of KKW and increasingly limited production of local ceramic types in an inferior quality, with restricted painted decoration and disappearance of some previously dominant forms\textsuperscript{104}. Destruction of EBA sites also took place in what has been termed a ‘de-urbanisation process’, resulting in a cultural break from the earlier EB II-III.

However, more recent revisions of SL chronology have been conducted using radiocarbon dates from Tell Yarmuth, a large site with monumental architectural remains and stratigraphic levels spanning the EBA. These dates

\textsuperscript{98} Getzov, Paz & Gophna 2001, 31-34, 37. Getzov and colleagues further argue that the EB IIIA demonstrates a common urban settlement pattern within the Levant, which is marked by the continuation of urban settlements in the south, resettlement of some previously abandoned regions and foundation of new settlements.

\textsuperscript{99} Wright 1937, 72.

\textsuperscript{100} Hennessey 1967, 8-12; Callaway & Weinstein 1977, 12.

\textsuperscript{101} Esse 1991, 66.

\textsuperscript{102} Regev, Miroschedji & Boaretto 2012, 505; Höflmayer 2014, 135-137; Höflmayer, Dee, Genz & Riehl 2014, 529.

\textsuperscript{103} Philip 2001, 169.

\textsuperscript{104} Ben-Tor 1992, 122-124.
place the EB III at c. 2950/2900-2450 BCE, resulting in a shortened EB II\textsuperscript{105}. Two scenarios have been proposed for a dual division of the EB III: an EB IIIA that spanned a maximum of 70 years, or a 150 year long EB IIIA that was followed by a c. 2760-2710 EB IIIB\textsuperscript{106}. Accordingly, the previous ‘high chronology’ of the EBA SL is now redundant.

These various approaches to establishing an EB III chronology highlight the difficulty in utilising KKW as an indicator of this period. Issues arise from the ware’s restricted and variable spatial distribution and the use of somewhat circular reasoning to create associations between KKW and the EB III, whereby the former is taken to indicate the latter and vice versa. Furthermore, the presence of material from a particular period does not imply continuous site occupation, although this is often assumed in the archaeological literature, further complicating the chronologies of both KKW and the EB III SL\textsuperscript{107}.

4.3. Typology

KKW appears in a range of mainly open forms, with bowls, saucers and cups comprising the vast majority of vessels found, although jugs and jars are also present (Figure 1 & Figure 2). This indicates that KKW was not intended for the storage of liquids\textsuperscript{108}. Handles are common on both open and closed forms\textsuperscript{109}.

\textsuperscript{105} An earlier end date for the EB II is also plausible on the basis of these radiocarbon dates.
\textsuperscript{106} Regev, Miroschedji & Boaretto 2012, 523; Höflmayer, Dee, Genz & Riehl 2014, 540.
\textsuperscript{107} Esse 1991, 138-140; Philip 2001, 171.
\textsuperscript{108} Ben-Tor 1992, 109.
\textsuperscript{109} Bolger, Greenberg, Kroll & Palumbi 2014, 149.
4. Khirbet Kerak Ware in the Southern Levant

KKW can be broadly divided into the following categories:\(^{110}\):

**Table 1 – KKW Typology**

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Colouration</th>
<th>Decoration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bowls</strong></td>
<td>Small shallow bowls with slightly everted, inverted or vertical walls and slightly curved walls</td>
<td>Monochrome (primarily red but also brown) or black exterior and red interior</td>
<td>Appliqued design, usually one or two oblique ridges on exterior wall</td>
</tr>
<tr>
<td></td>
<td>Small sinuous-sided bowls of varying size/depth and with carinated midsections</td>
<td>Red or brown interior and top of exterior, black on rest of exterior</td>
<td>Highly burnished interior/exterior, small knobs and strap handles, fluting</td>
</tr>
<tr>
<td></td>
<td>Large deep bowls with gentle or flaring carnations</td>
<td>Red interior and black exterior, or buff/brown monochrome</td>
<td>Level of burnishing varies, some appliqued geometric designs</td>
</tr>
<tr>
<td></td>
<td>Broad shallow bowls with flattened or inverted rims and sometimes lug handles or a spout</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Jars/ Kraters</strong></td>
<td>Holemouth jars (relatively uncommon)</td>
<td>Red interiors and black or grey exteriors</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Deep kraters/jars with inclined or sinuous-sided walls and small strap handles</td>
<td>Red-black</td>
<td>Fluted or relief decorations in form of chevrons, concentric circles or spirals</td>
</tr>
<tr>
<td></td>
<td>Wide-mouthed jars or kraters, often with knob decorations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Culinary</strong></td>
<td>Conical lids (6-20cm in diameter), usually with pierced knobs to attach lid to vessel using string</td>
<td>Monochromatic (grey, brown or red)</td>
<td>Burnished, plain or coarsely combed, and some with zoomorphic knobs or handles</td>
</tr>
<tr>
<td>implements</td>
<td>Biconical potstands, some with knobs or internal edge near the rim to support vessels</td>
<td>Red</td>
<td>Highly burnished exterior, with corrugated bands, horizontal fluting, or fenestration</td>
</tr>
<tr>
<td></td>
<td>Semicircular andirons or portable hearths (15-30cm across façade), resembling a horseshoe</td>
<td>Rough grey fabric</td>
<td>Front posts often bear geometric or anthropomorphic features, including human faces</td>
</tr>
</tbody>
</table>

No fixed cooking vessels have been observed within the KKW repertoire, although some vessels were likely used for food preparation purposes. Rather, the conical lids, stands and andirons would have formed a cooking ensemble in combination with local tradition cooking vessels, as indicated by the soot marks found on many large andirons (Figure 2 & Figure 3)\(^\text{111}\). In addition, the larger KKW conical lids are wide enough to have covered most local SL holemouth cooking pots\(^\text{112}\). No storage vessels have been found in the KKW tradition, indicating that local style jars and pithoi were utilised for storage purposes\(^\text{113}\).

### 4.4. Decoration

The primary identifying feature of KKW is its thick slip and highly burnished exterior and, less commonly, interior surfaces, which exhibit a metallic or mirror-like appearance\(^\text{114}\). The vessels present in hues of red or black, or a bichrome form that exhibits red interiors and rims, and black exteriors (Figure 4)\(^\text{115}\). These prominent colours are achieved through firing during vessel manufacture\(^\text{116}\). Greenberg (2007), a key proponent for the migratory origins of KKW, has identified three primary colour categories within the KKW repertoire: red-black vessels, red slipped vessels, and grey or brown vessels. He interprets this tripartite colour division as reflective of different aspects of this new cultural group in the SL region; red-black ceramics evoke ceramic traditions from further north\(^\text{117}\), whilst red monochromatic vessels indicate adaptation to new circumstances of production, and grey or brown ceramics are associated with the necessity of imbuing the intimate culinary household sphere with explicit symbolism\(^\text{118}\).

This symbolism is most evident in the zoomorphic and anthropomorphic decorations on conical lids and andirons, which were utensils that were deeply

\(^{111}\) Bolger, Greenberg, Kroll & Palumbi 2014, 151.
\(^{112}\) Greenberg 2007, 261.
\(^{113}\) Greenberg & Palumbi 2012, 129.
\(^{114}\) Esse 1991, 52; Wengrow 2009, 33; Kibaroglu 2015, 221.
\(^{115}\) Ben-Tor 1992, 109.
\(^{116}\) See Section 4.5. Manufacture.
\(^{117}\) See Chapter 6. Origins of Khirbet Kerak Ware.
\(^{118}\) Greenberg 2007, 261, 265.
embedded in everyday household life through their connection to food preparation (Figure 5 & Figure 6)\textsuperscript{119}. A small range of other vessels bore incised decorations, some of which were filled with lime paste. KKW vessels were also often decorated in relief, ranging from ribbing, fluting and fenestrations, to round protuberances. Geometric motifs included circles, spirals, and chevron designs (Figure 7 & Figure 8). Decorations were applied both prior to and post-firing\textsuperscript{120}.

4.5. Manufacture

This section will outline the manufacturing process of KKW using a chaîne opératoire framework, as utilised by Iserlis (2009) and Greenberg (2012) in their respective studies. This approach attempts to reconstruct the production, use and discard of an artefact, whilst interpreting the producer’s behaviour and decision-making process\textsuperscript{121}.

KKW is produced locally throughout the SL, as demonstrated by a number of petrographic, macroscopic and typological analyses\textsuperscript{122}. Potters first collected soft, poorly levigated and gritty clay from sources located in relatively close proximity to the production site. They added temper to the procured clay, despite natural temper occurring in the clay groups utilised, which rendered them suitable for pottery production without addition of extra non-plastic components\textsuperscript{123}. Such inclusions consisted of grog, straw, organic materials, volcanic ash and sand\textsuperscript{124}. A variety of clay types were used without any indication of preference. This is demonstrated by Iserlis’s (2009) study at TBY, which highlighted the lack of association between vessel typology and clay or temper choice by allocating 39 KKW samples to eight different

\textsuperscript{119} Esse 1991, 52.
\textsuperscript{120} Ben-Tor 1992, 109; Greenberg 2007, 262.
\textsuperscript{121} Iserlis, Greenberg & Goren 2012, 318.
\textsuperscript{122} Sala 2008, 111-115, 118-120.
\textsuperscript{123} Iserlis, Greenberg & Goren 2012, 324-326. Group A (rendzina) and Group E clay was utilised by KKW potters at TBY, whilst Group A or D clay was used at TBS.
\textsuperscript{124} Ben-Tor 1992, 109; Philip 2001, 208; Iserlis 2009, 187-190; Bolger, Greenberg, Kroll & Palumbi 2014, 149. The silty quartz grains in sand inclusions indicate that they were mainly procured from soils.
4. Khirbet Kerak Ware in the Southern Levant

petrofabric groups. Despite the tendency for local manufacture and use of local materials, these features are common across KKW production sites.

KKW demonstrates a lack of morphological standardisation, with common vessel elements being limited to typological features, heavy burnishing, distinctive red-black colouration and the ubiquity of plastic decoration. This lack of standardisation is partially attributed to the handmade nature of the ware. The presence of tournettes in close proximity to KKW at TBY and other sites implies the intentional avoidance of the potters’ wheel by KKW manufacturers, as well as industrial alternatives such as moulds. Instead, radiographic and macroscopic analyses indicate that KKW bowls were consistently produced using pressing and beating techniques, whilst mixed coils and slab moulding was utilised for larger vessels.

These procedures enabled the creation of thin-walled vessels such as bowls, but also contributed to the structural integrity of thick-walled wares including large kraters and stands. After forming and thinning, the vessels were decorated by incision or in relief. Iserlis (2009) suggests that the consistent use of specific formation techniques and intentional avoidance of the potters’ wheel indicates that KKW is a highly conservative ceramic tradition. This is pertinent due to the role of ceramics in establishing and negotiating sociocultural boundaries through the assertion of cultural difference, which may reflect the presence of distinctive ethnic identities.

Microscopic analyses of burnished KKW indicate a high level of investment in surface treatment. This occurred after forming, drying and bisque firing, the latter producing the red colouration seen on the interior and upper exterior of many KKW vessels. The slipping and burnishing process involved the application of up to multiple layers (0.01-0.08mm) of a fine, sorted clay slip, following which burnishing occurred for perhaps an hour or more. The strong

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125 Iserlis 2009, 187.
emphasis on surface treatment in favour of clay procurement and preparation suggests that the aesthetic value of KKW was of greater significance to producers and consumers than its petrofabric makeup\textsuperscript{129}.

Following slipping and burnishing, the vessels were fired in a deoxidising and reducing atmosphere, which produced the black pigmentation seen on their exteriors\textsuperscript{130}. This firing process also strengthened the vessels, which were then polished again to achieve the reflective burnishing that is visible on KKW (Figure 9). This extensive and time-intensive surface treatment demonstrates the importance accorded to the visual appearance of KKW, which was reinforced through the manufacturing process. Such pottery decoration is highly communicative in nature and, amongst other messages, can convey information about the identities of those who produced and consumed it in relation to those engaging with other ceramic types. It further acts to legitimise such identities in a tangible and perceptible form\textsuperscript{131}.

It must be noted that andirons were produced very differently to KKW. Andirons typically do not exhibit controlled firing or the characteristic KKW slip and burnish. Instead, they were manufactured by combining local soil with water, and then kneading, forming, drying and firing. Iserlis (2009) contends that this differential production process demonstrates that andirons were an accompanying element to the KKW ‘cultural package’, rather than being a form of KKW directly\textsuperscript{132}.

4.6. Other ceramic forms in the Southern Levant

The procurement and manufacturing process of KKW differs greatly from that of other wares in the SL, which utilised contrasting technologies and techniques to produce vessels that deviate from KKW typologically, aesthetically and compositionally. These variations have been interpreted as

\textsuperscript{129} Ben-Tor 1992, 109; Iserlis 2009, 189; Bolger, Greenberg & Kroll & Palumbi 2014, 149.
\textsuperscript{130} Sherd cross-sections demonstrate that the black pigmentation on exterior surfaces of KKW extended into the vessel wall, resulting in the lack of an explicit border between the black and red sections of vessels.
\textsuperscript{131} Sackett 1977, 377; Ben-Tor 1992, 109; Costin 1998, 3; Iserlis, Greenberg & Goren 2012, 326.
\textsuperscript{132} Iserlis 2009, 189-190.
a sign of cultural difference, possibly indicating the presence of migrant peoples who communicated and maintained their cultural individuality through KKW as a visual signifier. In addition, local tradition EB III wares demonstrate ceramic antecedents in the EB I-II, whilst KKW does not. Overall SL site assemblages, non-inclusive of KKW, also display strong similarities with one another, highlighting relatively uniform regional ceramic demand, which may reflect broad similarities in social and economic practices. These findings support the interpretation of KKW as a foreign ceramic tradition that originates beyond the SL.

4.6.1. Metallic Ware

Metallic Ware (MW) is a brittle handmade ceramic found in shades of red, brown, buff or grey, and is uniformly coarse grained and evenly fired without addition of organic tempers. MW is found in a range of forms, meeting household and small industrial needs, although it was not suitable for open flame cooking. Its minimal decorative features include pattern combing, thin slips and continuous, infrequently patterned matte burnish (Figure 10 & Figure 11). However, many geometric and cultic seal impressions are found on MW jars or pithoi. Greenberg (2001) suggests widespread seal utilisation may serve as a metaphor for the ideological and social integration and uniformity of the SL EB II, with the decline and eventual disappearance of sealings indicating widespread social change.

MW was widespread throughout the EB II and was found in greatest, although variable, concentrations in the north of the SL. It demonstrates a high level of typological, compositional and chronological synchronicity in the areas where it is found in quantity, reaching as far south as the Jezreel Valley. Its production declined in EB III, with many sites previously characterised by MW

134 Greenberg & Porat 1996, 5-6, 15; Greenberg 2001, 190, 195-196; Philip 2001, 207. The provenance of seals found on MW may be similar to that of the vessels themselves as the seals were applied prior to firing, and may have identified the vessel’s contents or manufacturer. Alternatively, the seals may be imports, with seal application becoming increasingly common throughout the EB II and then rapidly diminishing prior to the end of this period.
135 Philip 2001, 207; Greenberg 2011, 47.
being unoccupied in this later period, whilst EB III settlements demonstrated marked reductions in the quantity of MW present\textsuperscript{136}. However, Hazor and Tell Qishykon both report phases where the appearance of isolated KKW sherds coincides with abundant MW. In addition, copious MW pithoi, storage jars and sherds have been found at various EB III sites. In conjunction with the development of sharply everted feathered-edge rims and rope decorations on MW pithoi necks in the EB III, this suggests that MW jar and pithoi production continued in this period after wider manufacture had ceased. This more limited production ended prior to EB IV\textsuperscript{137}.

MW was fired at a high temperature that produced a matte burnish, which contrasted with the glossy sheen of other SL EBA wares. The MW repertoire replicates almost the entire EB corpus of non-MW assemblages, but with greater emphasis on symmetry and functionalism, as demonstrated by its lightweight transportability, the avoidance of difficult to seal holemouth jars and replacement of ledge handles with streamlined loop handles. EB II MW forms include large deep bowls, platters, jars, saucers, spouted vats, and symbolic objects including animal figurines and bed models (\textbf{Figure 12})\textsuperscript{138}. Petrographic analyses indicate that MW may have originated from clay sources in a single area, with samples traceable to specific Lower Cretaceous formations in the Hermon region, where Greenberg and Porat (1996) suggest production may have occurred\textsuperscript{139}. Philip (2001) proposes that the provenance of clay materials from a single source may indicate large-scale production and significant economic integration, which is further exhibited by the ware’s distribution across EB II sites up to 80-110km from Mt. Hermon\textsuperscript{140}.

\textsuperscript{136} Philip & Baird 2000, 9.
\textsuperscript{137} Greenberg 2001, 190.
\textsuperscript{138} Esse 1991, 45-47; Greenberg & Porat 1996, 5-12. Metallic Ware platters often demonstrate a tool cut groove under their exterior rims.
\textsuperscript{139} Greenberg & Porat 1996, 5, 15-19. Although the petrographic composition of MW vessels is highly variable, Greenberg and Porat assert that most components indicate a single petrographic group that is utilised in altered proportions in different vessels.
\textsuperscript{140} Philip 2001, 207; Stephen Bourke, personal communication 2016. Despite the findings of Greenberg and Porat, further research is required to conclusively determine whether a single clay source can account for MW production. In addition, although a large-scale workshop distribution model has been proposed due to the widespread discovery of MW, the favoured interpretation is that of distribution via numerous small-scale exchanges occurring at the community or household level as utilitarian items are plausibly more likely to be produced by independent specialists and utilised by households indiscriminately. The geographically
MW contrasts with other concurrent SL ceramic traditions through its procurement of geographically distant raw materials, mass production and widespread distribution from a single production centre. Other than MW, the SL is generally characterised by ceramic regionalism in typology and vessel fabric, along with tendency towards local production and use of local materials. MW occurs in conjunction with the initial urbanisation of the northern SL and surrounding areas, and overtook local ceramic industries at many sites. MW is also uniform in its chronology, and petrofabric and geological provenance, indicating the presence of a cohesive and unified ceramic industry. Influences from the MW technique have also been detected at some southern sites, including Tell Yarmuth and Tell el-Hesi, where an abundance of combed, highly fired jars and pithoi that are petrographically different from northern vessels have been found, although this is not the case at sites with strong local ceramic traditions originating in the EB I. The focus of MW on petrofabric composition and standardisation created durable and functional vessels, which contrasted greatly with the highly specialised, aesthetic and innovative nature of KKW.

4.6.2. Red Slipped Burnished Ware

Whilst MW was ubiquitous in the northern SL, the softer, Red Slipped Burnished Ware (RSBW) was more common in the central and southern areas of this region. Its typological repertoire is similar to that of MW; however, its production was almost exclusively localised, with individual assemblages demonstrating aesthetic and compositional variations that

restricted production of MW may also be accounted for by limitations in physical distribution of required raw materials, rather than political control.

141 Greenberg & Porat 1996, 5, 16, 18-19. Links have been suggested between MW and urbanisation in the SL. MW production is believed to have occurred at sites where it is most typologically abundant, and which are in close proximity to trade routes, population centres and raw material sources. Most sites with MW can be placed near trade routes and transitional geographical points, with the rapid increase in EBA settlements being linked to the expansion of distribution systems in the SL.

142 MW may have become common at sites in relative proximity to its production location, or without pre-eminent and longstanding ceramic traditions, which facilitated its dominance over local industries.

suggest flexibility in their manufacture\textsuperscript{144}. This contrasts with the uniformity exhibited by MW\textsuperscript{145}.

Vessels were generally constructed of buff fabric, with brown or red slipped interiors and rims that were often highly burnished. RSBW vessels were found in a range of forms in the EB II and continued convergence in regional ceramic assemblages occurred in the EB III, with the exception of KKW. Loop handles, spouts and band slip decoration were common (Figure 13). The presence of numerous closed vessel types specifies olive oil production and the presence of liquid commodities. Technical studies indicate that a range of manufacturing techniques and materials were used for diverse vessel types, which has prompted the suggestion that different potters produced assorted parts of the ceramic repertoire. The primary vessel types are as following\textsuperscript{146}:

\textsuperscript{144} Philip 2001, 207-208.
\textsuperscript{145} Sackett 1977, 377; Hegmon 2000, 129-133; Greenberg 2001, 195-196. The decline of MW may have resulted from the new EB III landscape, which saw an increasingly urbanised phase of society marked by pronounced social differentiation and in which reduced demand for MW may have occurred due to growing competition. It has been suggested that this is associated with the arrival of KKW producers in the SL, with changing demand reflecting differences in the local demographic whereby new groups of people favoured alternate ceramic forms.
\textsuperscript{146} Esse 1991, 45-51; Philip 2001, 208-210. The model furniture has been interpreted as either imported or locally manufactured, with possible Mesopotamian influences.
Iserlis, Greenberg and Goren (2012) have also implemented the chaîne opératoire approach in the study of RSBW at TBY and Tell Beth Shean (TBS). Their petrographic and observational analysis demonstrates that local tradition potters utilised the most suitable clay from a fixed source, which was combined with water and kneaded, and contained no additional tempers. The coil technique was used for bowls and platters, whilst moulds were utilised to build the body. Mixed coil and wheel techniques were used for bowl, jug and jar production. Handles were added after the initial drying, and the vessels were then slipped, burnished and dried prior to firing. Zuckerman and colleagues (2009) suggest that RSBW potters may have had control over

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Iserlis 2009, 189; Iserlis, Greenberg & Goren 2012, 326.

### Table 2 – RSBW Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Colouration</th>
<th>Decoration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small bowls with inverted rims and carination</td>
<td>–</td>
<td>Pattern or radial burnish, some with diagnostic bands of red paint</td>
</tr>
<tr>
<td>Large bowls, some with spouts</td>
<td>–</td>
<td>Occasionally with radial burnish or horizontal and radial combination burnish</td>
</tr>
<tr>
<td>Platters with inverted or vertical rims</td>
<td>Buff fabric, often red or brown slipped</td>
<td>Pattern or radial burnish, often with small external groove below rim</td>
</tr>
<tr>
<td>Well-fired vats, some with spouts or loop handles</td>
<td>Buff or brown fabric</td>
<td>–</td>
</tr>
<tr>
<td>Flared rim jars</td>
<td>Light buff fabric</td>
<td>–</td>
</tr>
<tr>
<td>Holemouth jars with square or ‘knob’ rim</td>
<td>Light buff fabric in EB III (very dark brown in EB II)</td>
<td>–</td>
</tr>
<tr>
<td>Jugs or juglets with piriform bodies and narrow stump bases</td>
<td>Red</td>
<td>Burnished</td>
</tr>
<tr>
<td>Storage jars (pithoi) with ledge handles</td>
<td>Chalky white slip</td>
<td>‘Combed’ exterior</td>
</tr>
<tr>
<td>Model furniture (beds or chairs)</td>
<td>Red</td>
<td>Some with criss-cross designs</td>
</tr>
</tbody>
</table>
specific clays sources, with KKW producers accordingly being required to procure alternative clay materials. This may partially account for the wide variety of clays utilised in KKW production, whilst RSBW is manufactured using carefully selected fabrics\textsuperscript{148}.

The local EB III SL tradition is characterised by procurement of clay from fixed sources to produce a relatively small ceramic corpus with limited aesthetic decoration. This contrasts greatly with KKW, where much more time and effort was afforded to the final stages of vessel decoration whilst clay type was of secondary importance. KKW accordingly contrasts with RSBW in morphology, composition, manufacturing techniques, finishing and decoration, and exhibits a more varied repertoire that includes kraters, lids, stands and the accompanying andiron. Iserlis (2009) suggests that local potters’ focus on obtaining the most suitable clay and producing standardised vessels may be linked to consumer expectation regarding demand for pots with predictable physical qualities such as volume, durability or resistance to stress. In addition, local potters’ use of the wheel enhanced efficiency, whilst KKW production was vastly extended by prolonged surface treatment.

The significant knowledge base required in manufacturing KKW indicates its kin-bound nature where it operated as a medium of communication between group members whilst creating a boundary between local tradition ceramic producers and consumers, and thus marking a separate identity. Intentional differentiation is further indicated by the addition of non-plastic inclusions to clays at TBY by KKW potters, whilst local cooking vessels using the same clays did not contain additional tempers\textsuperscript{149}. Through technological separation the production of KKW vessels communicated an identity that was starkly distinct from that of the SL, and may have been maintained to perpetuate difference, reflecting active engagement by KKW producers within their local social contexts\textsuperscript{150}. In this ‘language-game’ producers and users of KKW imbued the ceramic with socially constructed meanings that contrasted with

\textsuperscript{149} Costin 1998, 3; Iserlis 2009, 187, 190-193.
\textsuperscript{150} Greenberg 2007, 266-267.
RSBW through typological, aesthetic and petrofabric difference\textsuperscript{151}. By interacting with KKW, sociocultural difference is marked and perpetuated, signifying the presence of variable identities within this context.

4.7. Conclusion

MW and RSBW contrast typologically with KKW, which lacks the narrow necks and pithoi forms that were associated with the EBA agricultural economy\textsuperscript{152}. KKW manufacturing techniques also deviate from the standardisation, efficiency and petrofabric attention accorded to RSBW and MW. Furthermore, RSBW and MW display ceramic development throughout the EB II-III, whereas KKW occurs in quantity solely in the EB III. Accordingly, both MW and RSBW are deeply enmeshed in the local traditions of the SL, whilst KKW appears without known antecedents and disappears quite suddenly from archaeological assemblages following the EB III\textsuperscript{153}.

The conservatism of KKW production and careful investment in its aesthetic and decorative qualities indicates its potential role as the signifier of a specific sociocultural identity. Its production in a specific range of forms further indicates intentional use in particular social behaviours or practices that contrast with the functions of other pottery from this period. This identity is maintained and communicated through active engagement between KKW and those who produce and consume it. The presence of a distinctive KKW-manufacturing identity group supports a migration model for the dissemination of this ware in the SL\textsuperscript{154}.

\textsuperscript{151} Thomas 1996, 60.
\textsuperscript{152} Philip & Baird 2000, 20.
\textsuperscript{153} Ben-Tor 1992, 109; Stephen Bourke, personal communication 2016. Many other types of EB III pottery also disappear at the end of this period.
\textsuperscript{154} Philip & Baird 2000, 20. See also Section 6.4. Distribution through migration.
5. Distribution of Khirbet Kerak Ware

5.1. Introduction

KKW experienced widespread but disparate distribution throughout the SL, and was particularly ubiquitous in the north, whilst being found in increasingly smaller quantities moving southward to Dead Sea sites including Bab edh-Dhra. Southern assemblages typically demonstrate a more limited typological range, usually consisting of small bowls and drinking vessels. Its introduction at each site occurs concurrently with changes in local ceramic assemblages or after a settlement gap. Coinciding with the appearance of KKW is an overall reduction in the quantity of settlements throughout the SL, indicating the amalgamation of previous sites to create fewer settlements with concentrated populations, and the refortification of walled settlements in the southern Jordan Valley. These extensive urban changes contemporaneous to the arrival of KKW indicates the existence of a dynamic socio-political environment in which new groups were interacting with existing populations in the SL.

KKW is predominantly found within domestic contexts, although the Granary or Circles Building at TBY may present one notable exception, which indicates its distinctive presence at this site. Accordingly, the distribution of KKW at TBY is considered in more detail, along with TBS, another diagnostic site. Examination of these two settlements and broader contexts of discovery provides further understanding into the SL KKW phenomenon, its patterns of distribution and origins, and additional insight into the identities of those who engaged with this ware.

156 Greenberg & Palumbi 2012, 127.
158 Getzov, Paz & Gophna 2001, 16.
5. Distribution of Khirbet Kerak Ware

Map 1 – Key sites in Southern Levant (adapted from Philip 1999, fig. 2)

1. Tell Dan
2. Hazor
3. Tell Beth Yerah
4. Tell esh-Shuneh
5. Tell Yaqush
6. Tell Beth Shean
7. Ta’anach
8. Megiddo
9. Tell Qishyon
10. Tell el-Hesi
11. Tell es-Sa’idiyeh
12. Tell Kabri
13. Bab edh-Dhra
14. Tell es-Sultan
15. Affulah
16. Khirbet ez-Zeraqon
17. Ai
18. Tell Yarmuth
5. Distribution of Khirbet Kerak Ware

5.2. Key sites in the Southern Levant

KKW has been found at a range of sites throughout the SL, including Megiddo, Affulah, Ta’anach, Hazor, Tell Qishyon, Tell esh-Shuneh North, TBY and TBS\footnote{Esse 1991, 98.}. Its distribution varies from site to site and within site assemblages. Greenberg and Palumbi (2012) identify two key site types for KKW: those where KKW was added to the existing ceramic repertoire, as at TBY, Hazor and Tell Qishyon, and those where KKW replaced local tradition production, either immediately, as seen at Tell esh-Shuneh, or following a period of coexistence at Tell Yaqush and TBS. The largest sites demonstrating significant KKW production are extant EB III settlements with persistent local ware production\footnote{Greenberg & Palumbi 2012, 127.}. Miroshedji (2000) has divided the distribution of KKW into three zones on the basis of frequencies in distribution and type (Figure 14)\footnote{Miroshedji 2000, 259-265; Iserlis, Greenberg & Goren 2012, 326.}:

<table>
<thead>
<tr>
<th>Zone</th>
<th>Region</th>
<th>KKW Presence</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>Sea of Galilee, northern Jordan Valley, eastern Jezreel Valley</td>
<td>Entire KKW repertoire in large quantities and hybrid forms (RSBW made with KKW technology or KKW imitations made with local technology)</td>
<td>Local production at Hazor, TBY, TBS, Tell Yaqush, Tell esh-Shuneh, Affulah, Tell Qishyon</td>
</tr>
<tr>
<td>Peripheral</td>
<td>Southern areas of northern valleys</td>
<td>Smaller quantities of KKW in reduced range of mainly open forms (bowls and kraters)</td>
<td>Megiddo, Ta’anach, possibly as work of ‘itinerant potters’</td>
</tr>
<tr>
<td>Other</td>
<td>Remainder of SL, including upper Galilee, western coast and south of Jezreel Valley</td>
<td>Mainly single sherds in limited numbers from small bowls</td>
<td>Distribution through trade with north, or ‘itinerant potters’ who travelled south</td>
</tr>
</tbody>
</table>

The EB III levels from sites in the northern SL are most relevant to the study of KKW as they are representative of the ceramic assemblages from this period and contain a range of ceramic forms.
### Table 4 – KKW Distribution at Key Sites

<table>
<thead>
<tr>
<th>Site Type</th>
<th>KKW Find Contexts</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazor</td>
<td>Small and large monochrome and bichrome bowls, potstands with paste-filled incisions, conical lid, holemouth jar</td>
<td>Domestic room complexes from Stratum XX (EB III) and local petrofabric materials indicate local production</td>
</tr>
<tr>
<td>Tell esh-Shuneh</td>
<td>Small monochrome bowls, sinuous-sided bowls, large deep appliqued design bowls, plain and corrugated stands, andirons, conical lids with geometric designs</td>
<td>Domestic</td>
</tr>
<tr>
<td>Tell Qishyon</td>
<td>Large potstand, small and large bowls, sinuous-sided bowls, knobbed conical lids, incised and filled geometrically decorated sherds</td>
<td>Paved floors in domestic structures in association with other EB III pottery</td>
</tr>
<tr>
<td>Affulah</td>
<td>Corrugated and incised stands, small and large bowls, knobbed conical lids</td>
<td>Domestic and mortuary (majority found in two burials with MW, RSBW and animal bones)</td>
</tr>
<tr>
<td>Ta’anach</td>
<td>KKW sherds from up to 30 vessels, including large coarse bowl fragments</td>
<td>Domestic</td>
</tr>
<tr>
<td>Megiddo</td>
<td>KKW bowl fragments</td>
<td>Room complex in close proximity to ceremonial precinct</td>
</tr>
<tr>
<td>Tell es-Sultan (Jericho)</td>
<td>Bowls, jugs, small jars/kraters, carinated sinuous or straight-sided bichrome bowls (open shapes abundant)</td>
<td>Domestic contexts on the mound and in adjacent necropolis, and possible distribution through diffusion and artefact exchange</td>
</tr>
</tbody>
</table>

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5. Distribution of Khirbet Kerak Ware

The occurrence of KKW in similar EB III assemblages across the northern sites of Hazor, Tell esh-Shuneh and Tell Qishyon, as well as TBY and TBS, reinforces the integrated nature of the ceramic landscape in this period. Such interaction of peer polities would have facilitated the diffusion and exchange of artefacts and styles throughout the region\textsuperscript{163}. The sherds at Ta'anach and Megiddo are also similar to those more commonly found at TBY, TBS, Affulah and Tell esh-Shuneh, further demonstrating contact between the peripheral and nuclear zones of KKW distribution\textsuperscript{164}.

Petrographic analyses of KKW sherds from such ‘peripheral’ sites indicate they were produced in one of the main production centres in the Jezreel Valley and exported to their find places, or were locally manufactured. Furthermore, sherds discovered outside of the ‘nuclear’ or ‘peripheral’ areas were either produced in the core region of KKW distribution or have local petrofabric makeups, indicating the possibility of production sites outside of the core area. This latter vessel type possesses the grog, organic inclusions and silty clay that are also present in vessels at the main production centres, indicating the maintenance of regional manufacturing techniques. This demonstrates the diffusion of ideas and technology that occurred alongside trade and exchange in the EB III SL. These long distance SL exchange networks were part of a larger interregional trade system in the wider Near Eastern region. Vessels exported to the south are generally small bowls, which were easier to transport over lengthy distances\textsuperscript{165}.

Tell es-Sultan, although providing the most comparable KKW assemblage to nuclear and peripheral sites, lacks many distinctive elements and shapes of northern KKW, such as kraters, conical lids, potstands and andirons\textsuperscript{166}. Macroscopic and typological observations conducted separately by Kenyon, Garstang and an Italian-Palestinian excavation team, indicate that local variants of KKW demonstrate diversity in form, application of slip and

\textsuperscript{163} Greenberg 2000, 193.  
5. Distribution of Khirbet Kerak Ware

burnishing. In addition, Sala (2008) argues that local vessels were fired at a lower temperature, resulting in subdued reddish or dark grey colours, and demonstrate smoother carination. This typological variation, along with the geographical distance of Tell es-Sultan from core production sites, indicates that northern ceramic traditions were less potent in this region.

Sala further contends that traditional northern KKW is predominantly found in tombs in open shapes that are easily transportable, whilst local variations appear in domestic contexts and may have been inspired via diffusion and contact through exchange (Figure 15 & Figure 16). This differential distribution of KKW throughout the SL indicates the varied mechanisms that enabled the dissemination of this ware throughout the region, with cultural and commercial interactions facilitating trade and diffusion of technology and ideas, or the movement of potters, and enabling the southward spread of KKW from its more ubiquitous presence in the northern ‘core’\textsuperscript{167}.

5.3. Tell Beth Yerah

TBY is located on the west bank of the Sea of the Galilee, in the northern SL (Figure 17)\textsuperscript{168}. In addition to being the type-site for KKW, TBY is significant as its occupation sequence continuously spans the EBA and the site has been excavated thoroughly across the mound, enabling comparison between areas from the same chronological phase\textsuperscript{169}. These extensive excavations began with Albright’s discovery of KKW during his 1926 survey of the site.

B. Mazar, Stekelis and Avi-Yonah first systematically excavated TBY from 1944-46 on behalf of the Oriental Institute. During these excavations they discovered defensive features, dwellings, an abundance of ceramics and a larger structure in the south of the mound. Following this, P.L.O Guy conducted a five-month excavation season in 1950. In 1951-52 P. Bar Adon unearthed significant quantities of KKW and defensive gateways in the southern part of the mound. Additional Oriental Institute excavations took

\textsuperscript{167} Sala 2008, 111-120; Nigro 2009, 69.
\textsuperscript{168} Maisler, Stekelis & Avi-Yonah 1952, 165.
\textsuperscript{169} Paz 2009, 197; Greenberg 2011, 41.
place throughout the 1960s. D. Ussishkin and E. Netzer conducted salvage excavations in 1967, and discovered KKW in EB III strataums that chronologically paralleled those previously found by Mazar and his team. R. Amiran and C. Cohen, and later D. Bahat from the Israeli Department of Antiquities, conducted further salvage excavations in 1976, and were followed by E. Eisenberg and O. Yoge\textsuperscript{v170}. A chronology for TBY has been established on the basis of these excavations.

The site's central and southern areas consisted of domestic structures and room complexes. In contrast, the northern section (Area SA) contained a large structure that is perceived to be the centre of public activity at TBY and is unique within the Levant (\textit{Figure 18 & Figure 19})\textsuperscript{171}. The building contains an entrance courtyard housing three ovens, one with fragments of a large KKW stand and bowl. A destruction layer abundant with KKW and broken, charred animal bones has been uncovered on the floor of the courtyard. Ample KKW is also found inside the building\textsuperscript{172}. The structure dates to early EB III and was carefully planned, with houses being demolished in the previous period to create space for its construction. Its stone outer walls have deep circles sunk into them, from which the name ‘Circles Building’ was coined\textsuperscript{173}. However, it was later abandoned and subsequently restructured to create separate spaces that were used for various small-scale industries\textsuperscript{174}. The initial construction phase produced only local tradition pottery, which contrasts with

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{170} Esse 1991, 37-41.
\item \textsuperscript{171} Esse 1991, 53; Paz 2009, 204.
\item \textsuperscript{172} Mazar 2001, 447-453; Greenberg, Paz, Wengrow & Iserlis 2012, 97-98. A thick clay ring (\textit{kernos}) depicting two bulls' heads and a zoomorphic libation vessel representing a lion were also found in this building. The latter is the only EB II-III zoomorphic vessel known from this region.
\item \textsuperscript{173} Each circle was divided by four narrow partitions that were oriented to the points of a compass. These circles have been interpreted as silos that were covered with domed roofs. Mazar (2001) suggests that the encompassing structure may have been constructed to contain the silos within one cohesive building. Accordingly, the granary interpretation has been privileged in favour of the fort, palace or temple explanations that were also put forward by the building’s original excavators. Additional parallels between this structure and similar buildings in the Mediterranean, Anatolia and Transcaucasus support this. However, Mazar argues that temple and granary interpretations need not be mutually exclusive due to the presence of hearths that may have burned incense and the discovery of cultic objects. This indicates the Circles Building may have served as a temple whilst its granaries held an economic role, with a similar phenomenon being detected at other Mediterranean sites such as Melos.
\item \textsuperscript{174} Mazar 2001, 447-454; Greenberg, Paz, Wengrow & Iserlis 2012, 97-98; Greenberg & Paz 2014, 44-45.
\end{enumerate}
\end{footnotesize}
5. Distribution of Khirbet Kerak Ware

the later abundance of KKW, indicating that the structure was initially built by local inhabitants of TBY and later repurposed at a time that coincided with the appearance of KKW\textsuperscript{175}.

Greenberg and colleagues (2012) have interpreted the abundance of KKW, animal remains and refuse in this building as evidence of the presence of producers of KKW, who they distinguish from the existing population of TBY. The refuse and animal carcasses found in the building’s courtyard indicate that this area was used for food preparation and possibly also consumption\textsuperscript{176}. This initial occupation appears to have involved temporary construction within an abandoned settlement, a trend that has been detected at other extant SL sites with KKW\textsuperscript{177}. Such structures demonstrate clear discontinuity in form, nature and material culture from the previous period\textsuperscript{178}. The existence of such a monumental public structure demonstrates a high degree of town planning and socioeconomic organisation due to the large labour force and architectural knowledge required in its construction. Accordingly, the Granary reflects a complex economic system, involving specialisation, large-scale architectural planning and resource redistribution, along with long-term food storage and possible interregional trade of grain, which Esse (1991) argues may indicate the presence of a strong central authority at TBY\textsuperscript{179}.

Architectural features additionally denote major social reorganisation during the transitional EB II-III phase, as seen in increasing settlement fortification which would have required significant labour in its construction and maintenance\textsuperscript{180}. A large south-eastern enclosure surrounded by monumental walls, and appearing to have served administrative or military functions, was

\textsuperscript{175} Paz 2009, 204.
\textsuperscript{176} Greenberg, Paz, Wengrow & Isertiis 2012, 101-102; Greenberg & Paz 2014, 44-47.
\textsuperscript{177} Greenberg & Palumbi 2012, 130.
\textsuperscript{178} Paz 2009, 205.
\textsuperscript{179} Esse 1991, 53; Mazar 2001, 449, 461; Greenberg & Paz 2014, 44-45. The building's storage capacity surpassed the projected amount of grain required by the inhabitants of TBY, indicating possible exchange in agricultural resources.
\textsuperscript{180} Esse 1991, 53; Greenberg & Paz 2014, 31, 39, 45-49. A mudbrick wall was constructed at the site's southern border, which was its only side not bound by water. Additional walls were built in EB III. The poor construction quality of a wall from middle/late EB III indicates potential social instability, which parallels the wider regional volatility that is reflected in declining grain yields.
also constructed during the middle EB III, suggesting that public architecture was shifting to the south of the mound in contrast with its previous northern presence. This increase in monumental structures reflects the growing social segmentation that is observed across the EB III SL. The construction of the Circles Building over earlier houses is particularly emblematic of disruption in the domestic environment at TBY.

Domestic architecture from TBY further demonstrates the transitional nature of this period through the abandonment of some structures and conversion of private space into open areas in the late EB II. Additionally, the southern gate in Area BS was blocked and the street system abandoned, and later utilised for refuse disposal. Similar patterns are detected in Area EY. As the town was repopulated in EB III, new houses were built in open spaces that were previously utilised for communal activities, implying greater emphasis on individual families and segregation of economic activity. KKW appeared at TBY in this period and was present in both the early and middle/late subdivisions of the EB III\textsuperscript{181}.

KKW vessels and andirons are present in the courtyards of many houses, and are found in conjunction with paved patches, hearths and other such features, indicating that consumers of KKW used these areas for food preparation. This parallels the presence of KKW in the Circles Building courtyard, which is also believed to have held a food preparation function, indicating that groups espousing similar identities occupied both these domestic dwellings and the monumental granary structure as people tend to employ conservatism and resist change in their ways of preparing foods as a mode of signifying and preserving group identity\textsuperscript{182}.

Differences in food processing have also been detected. During the EB II grain demonstrated limited chaff and weeds, suggesting that it came from

\textsuperscript{181} Paz 2009, 198-200, 204-205; Greenberg & Paz 2014, 39-41, 45-47, 50. New houses were built with spaces in between them that were used for food storage and preparation by local ware and KKW users. The main road into the town was also paved at this time, indicating increased movement of people and goods.

storage and was processed prior to being stored. In addition, garbage was deposited in pits or near living areas. In contrast, refuse was accumulated in the streets in EB III, and contained a high proportion of chaff and weeds, indicating that grain was provenanced directly from the field and processed in the home. This divergence in technique coincides with the appearance of KKW producers at TBY, highlighting the existence of highly variable sociocultural identities at this site that contrast with the communal and homogeneous nature of the previous period.

In addition, early EB III houses with abundant KKW assemblages do not contain the local platters that are relatively ubiquitous in local ceramic assemblages, but instead exhibit greater quantities and types of large, heavy KKW kraters and bowls (Figure 20). This difference in vessel shape indicates diversity in consumption practices, with differing foodways generally being perceived as a strong indicator for the presence of culturally and ethnically varied groups due to the in-group perpetuation of nourishment practices that has been observed both anthropologically and archaeologically.

The multiplicity of identities at TBY is further attested by a number of archaeological factors. The frequent occurrence of andirons and installation fragments demonstrates the presence of the KKW ‘cultural package’, consisting of vessels and associated food production utensils that also occur at other locations in the SL. Votive vessels and figurines manufactured in the KKW style, along with flint debris, gold and copper artefacts, and copper slag, have been discovered in areas where food consumption and preparation, and refuse disposal occur. The recurring manifestation of such artefacts in conjunction with KKW and in areas occupied by those engaging with this ceramic indicates the presence of a unique sociocultural identity that is distinct from that of other occupants of TBY.

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185 Greenberg, Paz, Wengrow & Iserlis 2012, 102. Such metal artefacts are typically associated with the Kura-Araxes tradition of Anatolia and Transcaucasia. See Section 6.2.3. Associated Evidence for further detail.
186 Greenberg & Goren 2009, 131; Paz 2009, 198.
5. Distribution of Khirbet Kerak Ware

Both continuity and change is present at EB III TBY. Stability is maintained in the domestic architecture of Area SA, and the central and northern sections of Area EY. In contrast, Area BS was structurally reorientated, and partial rebuilding and internal changes also occurred in parts of Area EY where southern and western houses were abandoned at the end of EB II. After a period of disuse, these houses were later rebuilt to a larger size, indicating a tendency toward communal living and larger kinship units, and occupied by consumers of KKW. This contrasts with the smaller houses that were occupied by those consuming local tradition ceramics. These architectural differences demonstrate the varied lifeways of those alternatively engaging in either KKW or RSBW, highlighting the existence of diverse sociocultural identities not only through food preparation and consumption patterns, but also social organisation and settlement structure at TBY.

Paz (2009) perceives the continuation of domestic architecture and local tradition pottery production at TBY as a means of maintaining sociocultural identity by the city’s local inhabitants, who were required to continuously renegotiate their group and physical boundaries following the appearance of KKW producers and consumers in EB III. Accordingly, just as those engaged with KKW were maintaining, communicating and legitimising their unique identities through the manufacture and consumption of their unique ware, so too were those partaking in local ceramic traditions, as seen in the presence of tournettes which indicate ceramic specialisation. The ubiquity of RSBW in assemblages both pre- and post-dating KKW further indicate the stability of this local identity despite the extensive social changes that occurred with the arrival of new population groups at TBY. This phenomenon also occurred previously with the introduction of MW, where it was only found in limited quantities to the south of the mound, whilst it was abundant in the north.

188 Dever 2007, 53; Greenberg & Goren 2009, 131.
189 Sala 2008, 120; Paz 2009, 205; Greenberg 2011, 46-48. Influx of ceramics from other regions is also indicated by the presence of Red Polished Ware and combed ware jugs that suggest trade in oil or wine, whilst Light Faced Painted Ware creates chronological associations between TBY and Egypt, and cultural links with others sites in the SL. KKW was disseminated throughout the SL from nuclear sites into geographically peripheral settlements and beyond using these regional connections.
The occurrence of the EB II settlement crisis created a socio-political environment in which community ties were loosened at TBY, with more emphasis on individual families. This enabled KKW producers to occupy the spaces between existing families and neighbourhoods without triggering wider societal conflict, facilitating the creation of pottery workshops by minority groups within the site. Study of areas UN, BS and EY demonstrates that KKW was unevenly distributed in the early EB III, and mainly found in open areas and structures that were abandoned in the late EB II. In contrast, other houses did not engage with KKW at all, indicating that KKW was initially distributed in a highly segregated manner that reflects the distinct sociocultural identities of those who engaged with it as divergent from the local RSBW consuming population.\(^{190}\)

Throughout the course of the EB III, KKW became more evenly distributed and integrative, denoting the gradual development of a more diverse or open society that was willing to accommodate new populations in its social fabric.\(^{191}\) This is further demonstrated by a shift in KKW manufacture towards the use of Group A clay, which is traditionally used by local potters, and away from the Group E clay that was initially introduced by KKW makers. This decrease in clay variability and growing preference for local material in KKW manufacture suggests the gradual absorption of local ceramic values by KKW potters, and is accompanied by declining investment in surface treatment, with the depth of vessel slip decreasing from 0.02-0.08\,mm in the early EB III to 0.01-0.04 later in this period.\(^{192}\)

\(^{190}\) Greenberg 2000, 196; Paz 2009, 198; Greenberg 2011, 49-50.

\(^{191}\) Greenberg 2011, 50-51; Greenberg, Paz, Wengrow & Iserlis 2012, 101. Despite this social reorganisation, the town maintained its well-paved streets and north-south, east-west orientation with its southern fortification. Greenberg (2011) suggests this may highlight the continued presence of a central authority at TBY that maintained public structures and imposed spatial requirements to perpetuate the town’s overall ideology of organisation and governance. This emergence of an increasingly hierarchical society contrasted with the communal ideology of the EB II, and is observed across the EB III SL, not only in monumental buildings and settlement plans, but also domestic architecture.

\(^{192}\) Iserlis 2009, 191.
5. Distribution of Khirbet Kerak Ware

The shifting characteristics of KKW indicate increasing assimilation with local tradition ceramics through the adoption of local technological values whilst maintaining the original morphological form of vessels. Accordingly, although KKW initially preserved the identities of those engaged with it as separate and discrete, its distinctiveness declined over time through prolonged and increasingly frequent interaction between KKW and RSBW producers. This trend of increasing integration has been detected at other sites in the SL.

5.4. Tell Beth Shean

TBS is located 30 kilometres south of TBY and the Sea of Galilee, in the eastern Jezreel Valley (Figure 21). G.M. Fitzgerald first excavated the EBA levels of TBS in 1933, on behalf of the University of Pennsylvania. Later excavations were conducted by Mazar to investigate the EB III levels containing KKW. A range of KKW vessels were discovered in the EBA Levels XII and XI, alongside what Fitzgerald termed “small and insignificant buildings” that appear to be domestic room complexes. The abundance of KKW bowls, knobbed conical lids, corrugated potstands and andirons parallel those at TBY and indicate the status of TBS as a production site.

TBS is particularly significant as KKW dominates many of its EB III ceramic assemblages. This contrasts with TBY, where KKW was introduced to an established site and initially maintained as a ceramic minority within the existing local tradition. At TBS KKW is found in abundance after an EB II occupation gap in both Area M, where only one EB III phase has survived (M-1), and Area R, which exhibits a long sequence of EB III phases with KKW between the uppermost post-KKW (R-7a) and lowest pre-KKW (R-12) levels. KKW became increasingly assimilated into the local environment, a pattern that has also been observed at Tell Yaqush. The disappearance of KKW in the final phase of Area R (R-7) indicates a localised phenomenon that may reflect spatial segregation between the users of KKW and those consuming.

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193 Sackett 1977, 377; Bloch-Smith 2003, 403; Dykehouse 2008, 43.
194 Philip & Baird 2000, 23.
local ware in this part of the site. KKW is found in domestic contexts at TBS, reflecting its wider pattern of distribution in the SL.

Analysis of the ceramics from Area M demonstrates divergence in raw material selection between KKW producers and those manufacturing local wares whereby KKW potters employed clays from Groups A and D, whilst local potters used Group B and C clay. In addition, KKW manufacturers added inclusions of straw, textile fragments, organic materials and grog to the clay matrix of their vessels. A similar trend is detected in Area R, where producers of KKW used more variable raw materials than local tradition potters, and demonstrated the non-plastic inclusions and clear lack of compositional standardisation that is typical of KKW. Over time new clay (Groups I and Z) were introduced to the production of KKW, and coincide with the investment of reduced effort in achieving the bichrome colouration and intensive surface treatment that is characteristic of this ware. This experimentation with raw materials, and reduction in technological conservatism and traditional production processes, corresponds with TBY.

Coinciding with these developments is the reduction in production of local tradition vessels (produced from clay Groups B and C) over time. In addition, holemouth pots from levels R-10 to R-7 differ from the ‘grey holemouth pots’ of M-1 and R-12. These later ‘Beth-Shean Valley pots’ were reconceptualised versions of the original grey holemouths and were composed of highly variable fabrics, including original KKW fabric (Group A), newer KKW fabric (Groups I and Z) and non-KKW fabric (Groups G and GG). One non-KKW vessel also had inclusions of grog and straw, evoking the KKW tradition. These innovations highlight the production of holemouth pots by KKW manufacturers, who were required to fill the functional void created by

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198 Mazar, Ziv-ESudri & Cohen-Weinberger 2000, 272. A further trend has been detected whereby KKW potters used Group A clay in the production of coarse thick walled vessels whilst Group D was used for fine bowls, which may indicate the presence of distinct workshops that simultaneously manufactured KKW at TBS. This is an intra-site manifestation of the tendency for localisation that is implicit in KKW production.
199 Iserlis, Greenberg & Goren 2012, 324-325.
reduced local production due to their reliance on SL cooking and storage vessels, which were not part of the KKW repertoire\textsuperscript{200}.

Further hybridisation has been detected in the form of a local tradition bowl and jug from the late EB III, formed from Group D clay, which exhibit the typical KKW burnished slip. A holemouth pot fashioned from typical KKW materials has also been found in a post-KKW stratum. This indicates that some aspects of the KKW tradition were maintained at TBS, even following the ware’s disappearance. Accordingly, the descendants of KKW producers may have maintained their ancestral identity through production techniques, just as initial KKW potters did, due to the role of pottery in legitimising group membership and facilitating communication of sociocultural identities\textsuperscript{201}.

Early EB III TBS demonstrates the heterogeneous coexistence of two distinct ceramic-producing groups. The appearance of new populations is suggested by the influx of KKW and associated material culture following the preceding phase of destruction and abandonment, which may have enhanced local receptiveness to new traditions and peoples. This parallels contemporaneous situations at TBY, Tell Yaqush, Hazor and Tell Qishyon. However, over time local pottery producers and consumers were dominated by KKW, as exhibited by the disappearance of Group B and C RSBW pottery, the decline of a non-KKW ceramic industry, and the production of local tradition bowls, platters and holemouth jars in the KKW technique at TBS\textsuperscript{202}. This situation contrasts with TBY, where large-scale local pottery production continued despite the introduction of KKW\textsuperscript{203}. The distinctively communicatory nature of KKW is highlighted in its initial lack of a cookware typology as non-functional pottery features often convey information about the identities of those engaged with them in a manner that functional aspects of material cultural do not\textsuperscript{204}.

\textsuperscript{200} Philip & Baird 2000, 9; Greenberg 2007, 261; Bolger, Greenberg, Kroll & Palumbi 2014, 151.
\textsuperscript{201} Sackett 1977, 377; Iserlis, Greenberg & Goren 2012, 325-326.
\textsuperscript{202} Mazar, Ziv-Esudri & Cohen-Weinberger 2000, 276; Bloch-Smith 2003, 403; Dykehouse 2008, 43.
\textsuperscript{203} Iserlis, Greenberg & Goren 2012, 326-327.
\textsuperscript{204} Sackett 1977, 377.
5.5. Contexts of discovery

KKW was predominantly found in domestic contexts throughout the SL, a trend that has been observed at the northern ‘core’ sites of TBY, Hazor, Tell esh-Shuneh, Tell Qishyon and TBS. This domestic distribution is highly informative due to the fundamental and intimate role of the household as a unit of social organisation. Accordingly, patterns observed at the household level are most reflective of the sociocultural or group identities of its inhabitants. The presence of KKW in this uniquely social sphere demonstrates its importance in conveying and reinforcing the identities of those utilising it in everyday activities pertaining to food preparation and consumption. In addition, the household based manufacture of KKW highlights its traditional role in legitimising and preserving the kin-based identities of its producers, not only in consumption but also the production process.

Less common is the presence of KKW in mortuary contexts, where it is found at both Tell es-Sultan and Affulah. The mortuary provenance of the “traditional” northern KKW at Tell es-Sultan indicates that it may have held differential meaning or status for the local peoples than their own southern variant of this ware. This interpretation is favoured due to the importance associated with funerary goods in ancient societies. Artefacts deposited within burial assemblages included personal items, objects of status, and essential goods that the deceased would require in the afterlife, with such conspicuous consumption indicating that such objects were bestowed with value within the societies in which they appear. Accordingly, grave goods reinforce the status or identity of the interred and reveal wider ideologies espoused by such societies. The discovery of KKW in rooms located in

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207 Philip 1999, 47; Melissa Kennedy (University of Sydney, Research Associate), personal communication 2016. However, it must be noted that very limited mortuary evidence has been found in the EB III SL, which may partially explain the lack of KKW in funerary contexts in this region. EB II-III burials have also been found at Bab edh-Dhra, although not in association with KKW.
5. Distribution of Khirbet Kerak Ware

proximity to the ceremonial precinct at Megiddo and in recently erected EB III temples at Khirbet ez-Zeraqon may additionally hold information regarding the religious or spiritual significance of this ware, with similar ‘antis’ temple types being more common in the NL. However, further interpretations cannot currently be made due to the limited nature of evidence.\(^{211}\)

The sole discovery of KKW in a monumental or public context occurs in the Circles Building at TBY. Archaeological evidence indicates that producers of KKW occupied this structure and engaged in food processing, preparation and consumption activities. Associated material culture denotes KKW consumers as a distinct population group, who occupied this building soon after arriving at TBY and were separate from the original inhabitants of the site. Despite the outer monumentality of the Circles Building, the ubiquity of KKW in this structure is analogous to its presence in domestic contexts as the building’s interior was repurposed into smaller units that were occupied by KKW users and employed for ceramic manufacture, food preparation and other tangible expressions of identity.\(^{212}\) Accordingly, this manifestation of KKW demonstrates an extension and reinforcement of the highly communicative identity espoused by its producers and consumers that occurs at the most fundamental, household level. Those engaging with KKW thereby redefined and transformed the building into a domestic space through their daily engagement with material culture.\(^{213}\)

5.6. Conclusion

KKW is found throughout the EB III SL, with particular concentration at the northern ‘nuclear’ core production sites of TBY, TBS, Hazor, Tell esh-Shuneh and Tell Qishyon, where it manifests in its full typological repertoire. KKW is found in increasingly smaller quantities southward of this area, particularly outside the ‘peripheral zone’ where only small bowl sherds have been discovered. The ware is distributed differentially throughout these regions, as well as between northern sites. Accordingly, although KKW is abundant at


both TBY and TBS, it coexists with the local ceramic industry at TBY, whilst
dominating and eventually eliminating local ware production at TBS. Diversity
also occurs in assemblage forms, whereby KKW is predominantly found in
domestic settings, but also funerary, and perhaps sacred, contexts.

These patterns attest to the flexibility of KKW producers and consumers, who
communicated and perpetuated their unique sociocultural identity through
repeated actions pertaining to their distinctive lifeways in which specific forms
of material culture were employed. Such malleability whilst maintaining an
underlying communal identity is testified not only through lack of ceramic
standardisation and adaptability in material use, but also in their modes of
occupation and way of life. Over time the distinctive identity of those
engaged with KKW became increasingly diluted and integrated with the local
populations at sites of occupation, as attested by the progressively reduced
surface investment and integrative distribution of KKW at TBY and TBS. This
is the result of prolonged contact between local ware producers, who were the
original inhabitants of these sites, and KKW manufacturers, whose initially
distinct sociocultural identities indicates their origins beyond the SL. When
accounting for the cultural and geographical provenance of those participating
in the KKW tradition, the north appears the most likely candidate due the
abundance of KKW in the northern SL, whilst it occurs in only limited
quantities further south.

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214 Palumbi & Chataigner 2014, 257.
6. Origins of Khirbet Kerak Ware

6.1. Introduction

Typological and stylistic features, variable petrofabric composition and lack of local ceramic development indicate that KKW is not an indigenous ceramic tradition in the SL. Its distribution further denotes the initial presence of a discrete communal identity amongst those engaged with it, which is typified not only by the ceramic form, but also in its association with specific architectural features, domestic contexts and foodways. The concentration of KKW in the northern SL is indicative of its possible origins beyond this region. Strong parallels have been noted between SL KKW and the KA ceramic tradition of ATC, which spanned a period of 1500-2000 years in this region. The typological and decorative features of these two pottery types, along with their manufacturing techniques and associated cultural elements, display stark similarities. KA cultural features have also been detected beyond the ATC ‘homeland’, indicating the westward and southward spread of this cultural complex. Accordingly, the KA tradition is the most likely contender for the cultural origins of KKW.

A number of theories have been proposed to account for the SL dissemination of KKW and its geographical distance from ATC. Trade and diffusion have been suggested as mechanisms for the KA propagation, as the SL was a trade crossroads and cultural elements provenanced from ATC have been discovered in this region. This attests to the interaction between these northern and southern areas of the Near East, which would have facilitated the flow of goods and ideas. The migration of either specialist potters or entire communities is the other key explanation for the KKW phenomenon, developing from initial culture-historical perspectives to more nuanced models for the movement of peoples. The presence of a distinct KKW identity that is initially segregated within SL society lends weight to the interpretation of KKW as representative of migrant communities from the north. These various

215 Ben-Tor 1992, 121.
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explanations allow the KKW phenomenon to be considered from different perspectives and through novel modes of interpretation, enabling new insights to be gained into this ceramic form and its associated identities.

Map 2 – Key sites in Anatolia, the Transcaucasus and the Northern Levant (adapted from Philip 1999, fig. 1)

1. Arslantepe
2. Norsuntepe
3. Tell Abu-Hazar
4. Ras Shamra
5. Qal'at er-Rus
6. Tell Sukas
7. Hama
8. Qa’lat Siriani
9. Tell ‘Arqa
10. Chobareti
11. Anushavan
12. Karnut
13. Aparan
14. Sös Höyük
6.2. Kura-Araxes of Anatolia & the Transcaucasus

The KA or Early Transcaucasian (ETC) cultural tradition spread throughout ATC at the start of the Late Chalcolithic (c. 3500-3000 BCE) and lasted throughout EB I/IIA (c. 3000-2700 BCE), into EB IIIB/IIII (c. 2700-2200 BCE)\(^\text{216}\). ETC sites were occupied by farming and pastoral communities who persistently produced a particular pottery style; this indicates the intentional maintenance of a specific cultural tradition in ATC, as exemplified by material culture. The ETC complex was first detected through the discovery of this distinctive pottery in the area between the Kura and Araks Rivers, bordered by the Caspian and Black Seas\(^\text{217}\).

KA RBBW is handmade and exhibits black exteriors and either red or black interiors, which are highly burnished and often decorated in incision or relief. It contrasts with the regions into which it spread, where predominantly wheelmade, buff-coloured and often-painted ceramics were produced in a large range of functional shapes\(^\text{218}\). Archaeologists initially identified the typological, decorative and technological relationship between RBBW and KKW in the mid-20\(^{th}\) century. RBBW appears to have inspired the KKW tradition, which combines local SL pottery forms with those more reminiscent of ATC.

6.2.1. Ceramic Typology & Decoration

Although there is much regional variation between RBBW forms, a range of key typological shapes exist. Sinuous-sided pots, flat rimmed bowls, and loop or lug handles are common on both open and closed wares\(^\text{219}\). Two-handled jars with trono-conical necks, handle-less jars with cylindrical carinated bodies, jars with a thickened and flat rail rim, and ovoid or bag shaped jars are found in RBBW (Figure 22). Cooking pot forms with triangular ledge-handles

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\(^{216}\) Palumbi 2008b, 310; Greenberg & Palumbi 2012, 114. The Late Chalcolithic period is associated with Kura-Araks I, EB I/IIA with Kura-Araks II and EB IIIB/IIII with Kura-Araks III.

\(^{217}\) Kiguradze & Sagona 2003, 38.

\(^{218}\) Batiuk & Rothman 2007, 8-10.

\(^{219}\) Greenberg & Palumbi 2012, 118; Rothman 2014, 50-51.
along the rims are also present\textsuperscript{220}. These typological features contrast with local ceramic traditions outside of ATC.

Incised and relief designs in a core iconographical repertoire are common on RBBW (Figure 23)\textsuperscript{221}. Ladders, rows of triangles and double swirls are the most frequent designs, whilst other motifs are more regionally specific\textsuperscript{222}. Double swirl patterns are also present on metal pins often found in cemeteries alongside other KA cultural features\textsuperscript{223}. The thick slip and highly burnished, almost reflective, red/ black surfaces of RBBW bear strong similarities with SL KKW. The incised or relief decorations of both ceramics are also analogous, although KKW depicts varied motifs such as geometric circles, spirals and chevrons (Figure 24)\textsuperscript{224}. Both traditions also demonstrate anthropomorphic design\textsuperscript{225}.

Despite these similarities, KKW diverges from RBBW in some respects. Biconical stands and loop-handed vessels are not found in the KA tradition, but are common in KKW. Bowls and plates with inverted or flattened rims, and long-necked one-handed jars also appear to represent an adaptation of the KKW technique to produce local SL EB II-III vessel types. The use of deep red slips on some forms of KKW is characteristic of the Levant, whilst red colouration is produced through firing in the KA tradition\textsuperscript{226}.

6.2.2. Ceramic Manufacture

KA potters were highly adaptable to local conditions, utilising clay sources in close proximity to production sites, whilst demonstrating labour-intensive manufacturing techniques irrespective of their location\textsuperscript{227}. RBBW vessels were heavily burnished and fired in alternating oxidising and reducing

\textsuperscript{220} Philip 1999, 37.
\textsuperscript{221} Greenberg & Palumbi 2012, 118; Rothman 2014, 66; Rothman 2015a, 9190. Relief decoration was achieved by adding a thick layer of clay onto the vessel surface, which was then removed according to the intended design.
\textsuperscript{222} Sagona 1998, 24; Shanshashvili & Narimanishvili 2015, 135-136.
\textsuperscript{223} Rothman 2014, 66; Rothman 2015a, 9190.
\textsuperscript{224} Ben-Tor 1992, 109; Greenberg 2007, 261-262; Kibarolgu 2015, 221.
\textsuperscript{225} Esse 1991, 52; Ben-Tor 1992, 109.
\textsuperscript{226} Philip 1999, 38-41.
\textsuperscript{227} Greenberg, Paz, Wengrow & Iserlis 2012, 100.
atmospheres to produce their distinctive red/black colouration, a time-consuming technique that may have originated in eastern and central Anatolia\textsuperscript{228}. Handmade domestic production, which involved a larger number of potters, further extended manufacturing time and resulted in variations in vessel shape and size\textsuperscript{229}.

An array of similarities are evident between RBBW and KKW manufacturing processes, as supported by petrographic and \textit{chaîne opératoire} analyses\textsuperscript{230}. Like RBBW, the red/black colouration of KKW was achieved during the firing process through alternation of oxidising and reducing atmospheres\textsuperscript{231}. Both ceramic traditions also demonstrate a preference for local clay regardless of their compositional values, and a tendency to include additional tempers\textsuperscript{232}. A lack of morphological standardisation is evident in RBBW and KKW due to their handmade nature. This preference for handcrafting is seen not only in ATC, but also throughout the dispersion of RBBW/KKW, including at sites where the ceramic is found in close proximity to potters’ wheels. Furthermore, the extensive and time-consuming surface treatment process of RBBW/KKW is testament to the highly specific and closely interlinked nature of these ceramics, which reflects the importance accorded to their aesthetic values in the societies in which they were produced and consumed\textsuperscript{233}.

\begin{thebibliography}{99}
\bibitem{Frangipane2000} Frangipane 2000, 447; Kiguradze & Sagona 2003, 93; Kohl 2007, 88-89, 96; Palumbi 2008a, 44; Palumbi 2008b, 311; Palumbi 2012, 218; Isikli 2015, 244. Frangipane (2000) has suggested that RBBW may be a combination of two elements from separate cultural origins, with the typology of shapes being derived from central Anatolia whilst the red/black fabric colouration is provenanced in the Caucasus. This is based on the observation that contemporary central Anatolian wares were generally entirely black. However, red/black vessels have been found in Late Chalcolithic assemblages at Sös Höyük, whilst not appearing in the Caucasus until later and only in limited quantities, which indicates that the distinctive colouration of RBBW may have eastern Anatolian origins. In addition, typological attributes of early RBBW have been found in the Caucasian Chalcolithic, including small handles at the neck or shoulders, and tall, concave or swollen necks. These finds indicate that the KA pottery tradition was the combination of variable attributes that arose from interactions between northeastern Anatolia and the Transcaucasus towards the end of the Late Chalcolithic.
\bibitem{Rothman2015a} Rothman 2015a, 9191.
\bibitem{Iserlis2009} Iserlis 2009, 189.
\bibitem{Greenberg2001} Greenberg 2001, 46; Batiuk & Rothman 2007, 10; Palumbi 2008a, 42-43; Iserlis 2009, 188-189; Bolger, Greenberg & Kroll & Palumbi 2014, 149.
\end{thebibliography}
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6.2.3. Associated Evidence

In addition to RBBW, the KA tradition demonstrates a number of other archaeological features that are common throughout its distribution. Rectilinear, sub-rectilinear or circular houses of wattle and daub architecture are widespread. Architectural similarities are also reflected in the internal organisation of domestic structures, which are distinct from houses without RBBW in sites with a KA presence. The distribution of KA settlements throughout ATC demonstrates significant climatic and environmental variability, necessitating population mobility in order to procure widely dispersed resources.

Portable or fixed hearths are also found in frequent association with RBBW (Figure 25). The presence of such installations may indicate ritual elements within the household, which reinforced a common set of values that originated in ATC and were maintained throughout the KA dispersion. Such an interpretation is supported by the function of the hearths, which appears to surpass the purely utilitarian due to their central location within the household and the presence of anthropomorphic features that often resembled a realistic or stylised face. Paz (2009) suggests that such human features may represent ancestors, and that the hearth functioned as a central element of the household in its dual food preparation and ritual functions relating to ancestor worship. This ritual importance is further indicated by the repeated pattern of placing certain items around hearths, including single standardised horned clay animal figurines and handcrafted items of bone and stone.

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234 Mudbrick houses are also found, but are less common than the wattle and daub type.
235 Kiguradze & Sagona 2003, 38, 89; Rothman 2015a, 9191.
236 Sagona 2011, 693. Portable hearths are also known as andirons. In addition to anthropomorphic features, they also exhibit rare zoomorphic designs. Permanent hearths were circular depressions plastered onto a wall within the household, whilst portable andirons were manufactured from clay and progressed from a twin-horned to a horseshoe shape with three protruding features for support.
237 Sagona 1998, 22; Rothman 2015a, 9191.
238 Paz 2009, 208.
239 Sagona 1998, 23; Sagona 2006, 60; Sagona 2011, 693; Sagona 2014a, 13; Alison Betts (University of Sydney, Professor of Archaeology), personal communication 2016. This is seen at the site of Chobareti, in the Transcaucuses. However, such animal figurines are present throughout the Near East over a lengthy chronological span, which counteracts their position as possible diagnostic artefacts. Despite this, Sagona argues that there is very little artefactual variation in the widespread distribution of KA animal figurines.
particularly obsidian projectile points, which are also found in funerary settings (Figure 26). An absence of human figurines has been detected in KA site assemblages, contrasting with contemporary sites in other regions and further highlighting the importance of anthropomorphic representations on andirons.

Sites such as Sös Höyük in Anatolia do not exhibit any architectural features explicitly relating to ritual, suggesting that spiritual practices may have occurred within domestic contexts in KA society. The spatial and symbolic centrality of hearths within the home demonstrates the strong interconnection between ritual and domestic activities in daily life, which has also been observed in the SL where KKW is found in close association with andirons in predominantly domestic settings. Accordingly, a distinct communal identity was maintained and reinforced through the recurring use of RBBW in everyday and ritual activities occurring in domestic space.

Horseshoe shaped or stone-lined singular and collective burial cists at sites such as Chobareti also bear RBBW and other elements of KA material culture. Although the KA tradition has been associated with metallurgical expertise, metal artefacts are rarely found in quantity and demonstrate dispersed production. Despite this, exploitation of metal deposits occurred on a much larger scale in the EBA, and resulted in the production of hair spirals, spiral bracelets, spiral earrings, double spiral-headed pins and beads, and sometimes tools and weapons of arsenical copper. Although all elements of KA material culture rarely appear concurrently outside of ATC, enough are usually present to discern an ETC presence (Figure 27). Accordingly, the manifestation of these tangible cultural elements in association with RBBW,

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240 Obsidian projectile points are found in quantity at Sös Höyük.
244 Sagona 2014a, 14; Klauzner & Yalcin 2015, 355; Rothman 2015a, 9191. Many metal sources were located in southeast Anatolia. The production of metal objects with spiral designs parallels the appearance of this motif on RBBW.
245 Greenberg & Palumbi 2012, 118.
the hearth, and wattle and daub architecture, has been interpreted as a KA 'cultural package' (**Figure 28**)

### 6.3. Distribution through trade or diffusion

Trade, emulation and diffusion have been proposed as various facets of a wider theory that accounts for the dissemination of ETC cultural features in the Near East through the movement of objects and ideas along regional and interregional trade routes utilised for the exchange of metals, precious stones and agricultural or pastoral resources. Philip (1991) and Miroschedji (2000) have argued that a limited number of agents may have introduced novel ceramic technologies to new regions, or alternatively different peoples situated in similar social and environmental contexts may have adopted parallel production techniques that suited their wider circumstances.

However, when considering the latter explanation it must be noted that the SL displays significantly different geographical conditions to the mountainous origins of the KA tradition.

Access to northern metals and raw materials may have fostered commercial and cultural connections between ATC and the south. The abundance of metal resources in ATC is indicated by the quantitative increase in arsenical copper artefacts throughout the Chalcolithic period, which attests to the growth of metallurgical skills and craft specialisation. The widespread distribution of metal ores is seen in the presence of arsenical-copper spearheads at Arlsantepe that correspond compositionally to Anatolia and the Pontic region, where a number of metal sources have been discovered.

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246 Iserlis 2009, 190; Greenberg, Paz, Wengrow & Iserlis 2012, 102.
248 Philip 1999, 30; Miroschedji 2000, 255-265; Greenberg & Goren 2009, 130; Alison Betts, personal communication 2016. This interpretation may be supported by the incidence of predominantly open shapes in the KKW repertoire whilst closed vessels were also common within RBBW, possibly indicating the diffusion and emulation of specific cultural traits in favour of others. However, not enough research has been conducted into this observation to produce conclusive results at this stage.
249 Palumbi 2008a, 48-49.
250 Palumbi 2008a, 48-49.
251 Palumbi, Gratuzze, Harutyunyan & Chataigner 2014, 44.
The longstanding position of the Levant as prominent trade hub is attested by artefactual evidence. Obsidian from eastern and central Anatolia has been found in Pre-Pottery Neolithic levels at Tell es-Sultan and Pottery Neolithic levels at Tell Kabri. Foreign relations expanded further in the Chalcolithic when raw materials from all regions of the Near East were found in the Levant. Late 4th millennium BCE Anatolian copper containing arsenic and nickel has been found at Tell esh-Shuneh. Substantial trade in vessels, jewellery, stones, textiles and other goods occurred with Egypt in EB I, which was eventually replaced by further connections with the north in EB III-IV.

Gold ornaments, including a plaque resembling those from Alaca Höyük in Anatolia, have been found in an EB II tomb near TBY. A footed jar with four jugs from an EB III tomb at ‘Ain el-Assawir also has parallels with published vessels at Arslantepe that are contemporaneous with the appearance of RBBW at the site. Two green stone axes from the temple of Ai are also likely to be of Anatolian origin, and a series of incised bone handles may be from Anatolia or the Aegean. Incised bone tubes have been found at a range of SL sites, including Tell Hesi, and are similar to those found in Anatolia. A limited presence of seals also attests to connections between the north and south.

Philip (1999) argues that KKW spread through such networks of communication and exchange, rather than population movements, as the time between the arrival of RBBW in the Amuq and KKW in the SL was not sufficient for a migratory explanation. He further contends that small-scale migration would not account for the widespread proliferation of RBBW/KKW and its impact on local material culture. However, although Philip seeks to refute the ‘pots to people’ hypothesis, the current evidence for diffusion is scant and inconclusive. While these finds indicate exchange between the SL and ATC, the material evidence does not demonstrate a constant or influential trade relationship. Rather, it is represented by the presence of individual artefacts at various sites within the SL, which may have occurred from direct

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253 Richards 2003, 293.
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or indirect exchange\textsuperscript{256}. Furthermore no clear incidences of SL cultural elements have been detected in ATC, which is to be expected with a direct trade relationship\textsuperscript{257}. Accordingly, due to the currently limited nature of supporting evidence, it appears implausible that the close association between KKW and RBBW could have arisen through mechanisms of exchange, emulation or diffusion that were facilitated by trade relationships.

It must be acknowledged that differential modes of preservation may have culminated in a lack of artefactual remains, particularly if trade occurred in organic materials that experience rapid decomposition, such as food substances or textiles\textsuperscript{258}. Despite this, the restricted material evidence for prolonged and frequent exchange, coupled with the lengthy and difficult passage of a direct north to south trade route, diminishes the viability of such an account for the KKW/RBBW phenomenon\textsuperscript{259}. Accordingly, an alternative explanation must be sought for evident similarities between KKW and RBBW, and their associated material culture.

6.4. Distribution through migration

The earliest theory to explain the southward proliferation of ETC cultural traits was a single mass migration from eastern ATC, into central and southern Anatolia, and then the NL and SL. This theory was initially favoured due to the culture-historic tendencies that were implicit in early archaeological thought, where artefacts were associated with monolithic ‘archaeological cultures’\textsuperscript{260}. Accordingly, as the SL counterpart of the KA tradition, KKW became identified with ‘Khirbet Kerak people’\textsuperscript{261}. More recent theories propose that seasonal or permanent movements of peoples involved in trade, metalwork and agricultural activities occurred over a vast area and eventually brought RBBW and associated material elements to the SL\textsuperscript{262}.

\textsuperscript{256} Esse 1991, 103-104.
\textsuperscript{257} Palumbi, Gratuze, Harutyunyan & Chataigner 2014, 44; Alison Betts, personal communication 2016.
\textsuperscript{258} Lyman 2010, 4-5.
\textsuperscript{259} Greenberg & Palumbi 2012, 123.
\textsuperscript{260} Childe 1947, 81; Jones 1997, 15-18, 24-25; Batiuk & Rothman 2007, 8-10.
\textsuperscript{261} Woolley 1953, 31-33; Greenberg & Goren 2009, 130.
\textsuperscript{262} Palumbi 2008a, 39.
An alternative model involves the migration of individuals or groups of potters, rather than entire communities, who continued to produce their wares in southern societies. These ‘itinerant potters’ would have introduced new ideas and technologies to the SL that appealed to local peoples. Such an explanation has also been suggested for the presence of locally produced KKW as far south as Tell es-Sultan. While this theory may account for the lack of cooking pots and storage vessels in the KKW repertoire, it does not adequately explain the strong demand for this foreign ceramic, or its disparate distribution in the SL.

264 Phillip 1999, 44.
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6.4.1. Evidence in Anatolia and the Transcaucasus

Cultural evidence for KA migration has been found at a number of sites:

Table 5 – RBBW Distribution in Anatolia and the Transcaucasus

<table>
<thead>
<tr>
<th>Site/Region</th>
<th>Settlement</th>
<th>Period</th>
<th>Material Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus Province</td>
<td>Sites on hill routes connecting to ATC that increased in number over time</td>
<td>c. 3500-3000 BCE</td>
<td>Appearance of ETC pottery styles and techniques, and gradual development of hybrid ETC/local forms</td>
</tr>
<tr>
<td>Sös Höyük</td>
<td>Extant settlement</td>
<td>c. 3500-3000 BCE</td>
<td>RBBW found in domestic contexts in increasing quantity, with gritty tempers and vegetal inclusions, vessels of varying dimensions and thickness, loop handles and pierced lugs, and triangle, ladder and double spiral relief designs</td>
</tr>
<tr>
<td>Arslantepe</td>
<td>Located close to largest copper mine in this region Wattle and daub architecture replaced larger public buildings after c. 3000 BCE site collapse</td>
<td>c. 3200-2800 BCE</td>
<td>RBBW in increasing quantities/types over time, and appearance of handles, sinuous sides, andirons and trefoil hearths after site collapse</td>
</tr>
<tr>
<td></td>
<td>Extant settlement</td>
<td>c. 3500-3000 BCE</td>
<td>RBBW and ornamented andirons, with ETC designs later being painted on buff wares instead of incised/relief decorated RBBW, and the eventual disappearance of KA cultural features</td>
</tr>
<tr>
<td>Aparan III</td>
<td>Extant settlement</td>
<td>c. 3500-2900 BCE</td>
<td>Coil built highly burnished RBBW with variable composition and decorated in incision/relief, along with potstands, andirons and coarse ETC cooking ware</td>
</tr>
<tr>
<td>Karnut I</td>
<td>Extant settlement</td>
<td>c. 3500-2900 BCE</td>
<td>Coil built highly burnished RBBW with variable composition and decorated in incision/relief, along with potstands, andirons and coarse ETC cooking ware</td>
</tr>
</tbody>
</table>

265 Esse 1991, 69, 84-87, 96; Kiguradze & Sagona 2003, 89, 93; Palumbi 2003, 86; Batiuk & Rothman 2007, 8-9; Palumbi 2008a, 41-42; Palumbi 2008b, 325; Nigro 2009, 68; Paz 2009, 206-207; Zuckerman, Ziv-Esadri & Cohen-Weinberger 2009, 150; Iserlis, Greenberg, Badalyan & Goren 2010, 250-252; Greenberg & Palumbi 2012, 118-123; Klauzner & Yalcin 2015, 355; Palumbi 2015, 80-82; Rothman 2015a, 9191-9194. Arslantepe is particularly significant in its close proximity to a large copper mine due to the strong association that has been made between ETC culture and metallurgy. In addition, some RBBW at Arslantepe has been found in a temple building, paralleling the discovery of KKW in sacred contexts at Megiddo and Khirbet ez-Zeraqon.
Consideration of individual sites with RBBW and other ETC cultural features indicates an underlying distributional trend. New sites were established in EB I in areas that were well suited for agriculture and pastoral activities, which were strongly associated with ETC life\textsuperscript{266}. The presence of RBBW was initially limited, indicating the presence of traders or pastoralists who were segregated from local populations\textsuperscript{267}. However, as the numbers of settlements gradually increased, larger quantities of RBBW are present in a wider range forms.

Although local ceramics in this region were manufactured using tournettes and indicate a preference for maximising efficiency that contrasts with the handmade and unstandardised nature of RBBW, hybrid forms of these two pottery types emerged over time\textsuperscript{268}. Hybridity and inter-group interaction is further exemplified in the Arslantepe ‘Royal Tomb’, which demonstrates both KA and local cultural features, creating uncertainty as to whether this is the burial of ATC ‘migrants’ or an example of the local population embracing KA culture. This gradual integration of KA cultural features parallels the eventual assimilation of KKW into sites in the SL\textsuperscript{269}.

Batiuk and Rothman (2007) suggest that this pattern indicates the presence of multiple migrations from ATC, initially of pastoral or village groups, and then entire communities accompanied by distinctive elements of KA material culture, resulting in greater site numbers over time\textsuperscript{270}. Greenberg and Palumbi (2012), and Rothman (2014), interpret the manifestation of these strong KA cultural features, which primarily appear c. 2750-2500 BCE (EB II), as an indication that a second migratory movement occurred in this later period, during which greater connection to the ATC ‘homeland’ is demonstrated. Rothman (2014) perceives this population movement through the ‘vectors of

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{266} Greenberg & Palumbi 2012, 120-121; Rothman 2014, 42; Frangipane 2015\textit{b}, 178.
\item \textsuperscript{267} Rothman 2015\textit{a}, 9191.
\item \textsuperscript{268} Palumbi 2008\textit{a}, 42-43; Paz 2009, 206.
\item \textsuperscript{269} Greenberg & Palumbi 2012, 123, 127; Greenberg, Paz, Wengrow & Iserlis 2012, 101; Palumbi 2015, 80-82.
\item \textsuperscript{270} Batiuk & Rothman 2007, 9; Rothman 2015\textit{a}, 9191; Rothman 2015\textit{b}, 122. Although ETC migrants are traditionally believed to be pastoral nomads who travelled southward into the Levant, and east to modern day Iran, Rothman (2015\textit{b}) has more recently revised this interpretation and instead contends that the KA cultural dispersion occurred through the movement of village communities who employed certain pastoral ways of life.
\end{itemize}
\end{footnotesize}
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migration' model, whereby people dispersed into various locales from a single area of origin\textsuperscript{271}.

Furthermore, the KA coarseware cooking vessels that have been found at Aparan, Karnut, Anushavan, Arslantepe and Sös Höyük diverge typologically from RBBW, and are composed of a much rougher fabric without burnishing or additional decorative features. This preference for coarse cookware corresponds with the later use of local cooking vessels with KKW lids and potstands in the SL\textsuperscript{272}. As artefacts are only utilised in cultural contexts in which they hold meaning and are deemed appropriate, both RBBW and coarse cookware would have held value in the communities in which they are found. However, the clear functional distinction between them indicates that they were ascribed divergent values, with RBBW being regarded for its aesthetic and communicative role in reinforcing sociocultural identity through its close connection to domesticity and ritual, whilst coarseware was given meaning due to its functional purpose\textsuperscript{273}. Furthermore, the persistent utilisation of coarse cookware over a wide geographical area implies the existence of a communal identity that extended from ATC to the SL through resistance to change in food preparation and consumption practices, which reinforced group solidarity\textsuperscript{274}.

6.4.2. Evidence in the Northern Levant

RBBW first appears in the Amuq Valley, located between the Anatolian Plateau and the Levantine plains, in the late Chalcolithic/ early EBA\textsuperscript{275}. Throughout the EB IIB-III the level of RBBW increased, corresponding with a shift in settlement patterning from relatively large sites in the centre of the valley to smaller and more widely distributed settlements. Production of anthropomorphic andirons with incised motifs also occurs at this time. Excavation at larger sites exhibits a mixture of local wheelmade pottery and

\textsuperscript{271} Greenberg & Palumbi 2012, 120-121; Rothman 2014, 38, 42.
\textsuperscript{272} Paz 2009, 207; Iserlis, Greenberg, Badalyan & Goren 2010, 250-252.
\textsuperscript{273} Hodder 2000, 86-87.
\textsuperscript{274} Grantham 2007, 279-280.
\textsuperscript{275} Palumbi 2008a, 39. Stone-lined cists, which are characteristic of ETC burials, also appear in the nearby Euphrates Valley in the EB I.
RBBW, whilst smaller sites exhibit RBBW almost exclusively. This distribution is similar to the Mus region and may indicate a pattern of multiple migrations beginning with traders or pastoralists, and later agriculturalists, who created their own settlements whilst also interacting with the local peoples of the Amuq. There is also significant difference in the proportion of RBBW within individual NL site assemblages, signifying the differential importance of this ware in local contexts. Petrofabric studies indicate that RBBW was locally produced, plausibly at the household level. Although this NL RBBW demonstrates many characteristic features of ETC ware, some features are missing whilst additional elements have been added, highlighting gradual ceramic development as its producers were situated in new and variable contexts\textsuperscript{276}.

KA cultural elements are also found along the northeast Mediterranean coast and partially along the Orontes Valley. RBBW occurs in abundance at Ras Shamra, initially appearing c. 2900 BCE in very similar forms to the Amuq. NL vessels appear to hold consumption, storage and cooking functions. Along with the presence of andirons, these vessels may indicate the role of KA ceramics in the construction of a new cultural identity reminiscent of ATC, which is reinforced through food preparation and consumption practices centred on domestic and ritual activity\textsuperscript{277}.

In EB III RBBW appears in a limited typological range and is increasingly standardised through workshop production that was no longer embedded in the domestic sphere. Andirons also became uniform and ubiquitous, indicating loss of their symbolic and ritual significance\textsuperscript{278}. Greenberg and Palumbi (2012) argue that is indicative of weakening links with ATC, which deteriorated the role of cultural elements such as RBBW and andirons as markers of identity\textsuperscript{279}. Incidences of hybridisation, the appearance of alternate

\textsuperscript{276} Batiuk & Rothman 2007, 13-14.
\textsuperscript{277} Philip 1999, 30, 35-36; Greenberg & Palumbi 2012, 121-125.
\textsuperscript{278} Batiuk & Rothman 2007, 13-14; Greenberg & Palumbi 2012, 126. Cist burials were also replaced by new funerary customs that became increasingly focused on social differentiation at this time.
\textsuperscript{279} Batiuk & Rothman 2007, 13-14; Greenberg & Palumbi 2012, 126.
cultural features and integration into local populations is also demonstrated in the SL.280

NL RBBW production eventually ceased during the EB III. Andirons also disappeared from this region, highlighting their strong functional and symbolic connection with RBBW. Greenberg and Palumbi (2012) suggest that growing city-states, changes in sociocultural identity and altered trade networks may have interrupted or weakened the former communication channels between the north and south. This shifted interregional relations from the previous flow of goods, people and information in the EB II.281

6.4.3. Evidence in the Southern Levant

KKW is widely considered to be the SL counterpart of RBBW due to a number of similarities between these ceramic forms.282 Although the presence of KKW in the SL demonstrates a departure from its normally mountainous distribution, it is predominantly concentrated in the relatively fertile north Jordan Valley and adjacent river valley regions. These areas have agricultural potential due to their proximity to water sources, with ETC participation in agricultural activities being detected across the breadth of its distribution.283

KKW is similar to NL and ATC RBBW in type and technique, but also includes local SL pottery forms, whilst KA cooking pots are not present.284 Accordingly, KKW is a modified ceramic tradition that exhibits both KA elements and adaptation to its local context. The development and adoption of material culture is contingent on its socio-political setting, and the meaning of such objects to the societies in which they are utilised. Consequently, interactions between new groups and local SL communities produced KKW as a situational expression of a distinct communal identity.285

282 See Section 6.2. Kura-Araxes of Anatolia & the Transcaucausus.
283 Batiuk & Rothman 2007, 14; Rothman 2014, 40.
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A number of model wheels have been found in association with KKW, andirons and plastered installations in EB III contexts at TBY, TBS and Megiddo (Figure 29 & Figure 30). Such models are not found in earlier phases at any SL site, but have also been discovered in quantity at Arslantepe, Norsuntepe and Koructepe, which demonstrate abundant RBBW. A model cart bed with axles for wheel movement was also found at Norsuntepe. Greenberg (2014) suggests these models may represent ETC migrant technology due to their presence throughout the KA dispersion zone, with such carts allowing a mobile but agriculture and household-oriented existence. This preference for mobility is also seen in andirons, which are portable versions of ATC hearth installations, and pierced lugs on pottery that enabled lids to be tied to vessels. In addition, the lack of KKW storage vessels, despite being a component of the ETC ceramic repertoire, suggests they were intentionally not produced as part of an ideological or functional decision pertaining to the temporary existence of these peoples during their southward journey.

It has not been definitively determined whether KKW arrived contemporaneously across the SL. Its persistence varies across sites, lasting multiple phases at TBS and TBY, whilst only being present in one or two assemblages at Hazor and Tell Yaqush. This suggests that following its initial introduction, KKW communities followed different developmental trajectories in accordance with site-specific circumstances. The recently determined earlier onset dates for the SL EB III indicate the relatively concurrent arrival of RBBW/KKW in the NL and SL. Close similarities have also been observed in the ceramic typology of these regions, rather than gradual differentiation.

286 Greenberg 2014, 94-96.
287 Kiguradze & Sagona 2003, 38; Batiuk & Rothman 2007, 8-9. See also Section 6.2.3.
288 Paz 2009, 212; Sagona 2011, 692. It must be noted that animal bone studies indicate KA communities favoured a diversified agropastoral economy that espoused stability and minimal risk as opposed to specialisation in particular pastoral products, which suggests a less temporary existence than is often alluded to in studies of ETC culture.
289 Kimes 1982, 114; Richards 1995, 218; Thomas 1996, 59; Greenberg & Palumbi 2012, 127; Ross 2012, 39. In addition, no later KA influences are detected following the initial introduction of KKW to the SL.
over time. This evidence denotes that, rather than the slow movement of people over 200 years, a much quicker migration may have occurred where different groups espousing the KA tradition settled in various areas of the Levant\textsuperscript{291}.

### 6.4.4. Migration theories

The proliferation of KA cultural traits indicates a southwestern migration trajectory, bordering the internal slopes of the Taurus and Zagros Mountains, through the Elbistan region, to the point where the Taurus and Amanus Mountain ranges merge, and into the Amuq, as well as east through the Urmia basin to the Kangavar Plain\textsuperscript{292}. Southward migration continued along the Orontes Valley to the Hama, into the Beqa and Huleh Basin where KKW is present at Tell Dan, and then to the Jordan and Jezreel Valleys\textsuperscript{293}. Batiuk & Rothman (2007) contend that the distribution of ceramic evidence on this migration path indicates large-scale and multiple movements of groups of people who created new settlements along their route, with subsequent generations travelling further south. These sites exhibit the initial appearance of RBBW sherds, an increase in the number of exclusively RBBW sites, and eventually a mixture of RBBW and local wares at larger sites whilst smaller sites with only RBBW were maintained on the periphery. This patterning connotes the initial arrival of traders and pastoralists who brought externally produced vessels, and the subsequent influx of settlers who produced RBBW locally and began to dominate site assemblages\textsuperscript{294}. Such a trend is observed at Arslantepe, as well as Tell esh-Shuneh, Tell Yaqush and TBS in the SL where KKW eventually replaced local ceramic production\textsuperscript{295}.

\textsuperscript{291} Philip 1999, 34; Mazar, Ziv-Esudri & Cohen-Weinberger 2000, 258; Regev, Miroschedji & Boaretto 2012, 505; Höflmayer 2014, 135-137; Höflmayer, Dee, Genz & Riehl 2014, 529. This slower migration theory was initially favoured in accordance with ‘high chronology’, but is now being challenged due to the emergence of new radiocarbon dates from the Levant.

\textsuperscript{292} Greenberg & Palumbi 2012, 123; Sagona 2014a, 13.

\textsuperscript{293} Philip 1999, 30, 49. Possible seaward connections have also been highlighted by Philip as a potential explanation for the almost concurrent appearance of RBBW/ KKW in the NL and SL. He argues that a number of sites along the NL Mediterranean coast have a RBBW presence, whilst there is more limited evidence of RBBW and associated cultural traits in overland areas. However, this theory is currently inconclusive.

\textsuperscript{294} Batiuk & Rothman 2007, 15-16; Rothman 2015a, 9192.

\textsuperscript{295} Greenberg & Palumbi 2012, 127. This replacement occurs gradually at some sites and almost immediately at others.
A number of explanations have been proposed for the ETC migration. These include ‘push factors’ of environmental degradation and population pressure, or new opportunities for leadership and upward social mobility, and trade in animal products, viniculture, metals and metallurgical skills, as possible ‘pull factors’296. However, a single theory cannot adequately explain the propagation of KA features due to the vast divergence in their manifestation and development on an interregional and inter-site basis. Instead, diverse explanations may be applicable to different situations within the wider ETC population movement. Despite this, the late EB II SL ‘settlement crisis’ and resulting societal reorganisation may have provided new social and economic opportunities for the migrant populations who arrived shortly afterwards297. Accordingly, the divergence in pottery and other aspects of material culture from the ATC KA tradition may connote adaptation into the existing socio-political structure of the SL in an expression of Barth’s ‘situational identity’, where individuals partake in identities differentially according to their specific temporal and spatial context298.

Despite the flexibility of RBBW/ KKW, its underlying stylistic and morphological features are retained over more than 2000 years throughout a wide geographic expanse ranging from ATC to the SL299. Its prominent colouration contrasts greatly with local wares of Anatolia, the NL and SL, expressing an alternate social identity that challenges local ways of life through maintained distinction300. RBBW/ KKW, in combination with the recurrence of the hearth, reinforces the cultural unity of the KA tradition whilst also negotiating new identities in variable locations301. The continued rejection of the potters’ wheel, which would have maximised efficiency and output, further highlights the intentionality of this cultural complex through behavioural

296 Batiuk & Rothman 2007, 15-16; Batiuk 2013, 450; Rothman 2015a, 9193.
297 Paz 2009, 213.
300 Greenberg & Goren 2009, 129, 132.
301 Palumbi 2008a, 49-50; Paz 2009, 212; Rothman 2014, 38; Sagona 2014b, 22. Rothman (2014) and Paz (2008a) perceive the producers and consumers of these wares as a ‘diaspora’ community, akin to more recent applications of this term.
reinforcement. Rothman (2014) argues that, although certain elements of KA material culture are maintained throughout its dispersal, those engaging with RBBW/ KKW also adopt aspects of local cultural traditions in their new settings as a response to specific circumstances arising from prolonged and increasingly frequent interaction with other groups, which results similarities in artefact production processes, and hybrid or comparable material culture.

Palumbi (2008) contends that the underlying similarity of RBBW/ KKW and associated traits is the product of widespread diffusion from a single location, resulting from the exchange of goods, information and people in the ATC region. Accordingly, KKW demonstrates a heightened relationship between ATC and the SL in the EB III, as greater cultural similarities manifest. Batiuk (2005) perceives this dispersal of people or ideas as flowing both ways, with certain traits emanating from Anatolia whilst others came from the Transcaucasia, although little evidence has been found for the northward movement of material culture from the SL. In combination, these architectural and artefactual features reflect everyday and ritual behaviours of those engaging with them, demonstrating the technologies and knowledge systems in which they were embedded. KKW operated as a ‘learning network’ mode of knowledge transmission that reproduced tradition and continuity through vessel manufacture and use on a kinship and household-oriented basis that was in accordance with its wider social rhetoric.

The variable nature of material culture and its active permeation of ethnic and political boundaries calls for its conception in terms of the recurrence of technologies, artefacts types, household organisation, mortuary customs and other elements in association with a form of social agency, such as migration.

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304 Palumbi 2008a, 49-50.
305 Richards 2003, 293.
306 Batiuk 2005, 225. See also Section 6.3. Distribution through trade or diffusion.
307 Greenberg & Palumbi 2012, 111.
308 Shennan 1991, 34; Thomas 1996, 60; Hegmon 2000, 130-132; Tilley 2000, 425; Iserlis, Greenberg, Badalyna & Goren 2010, 248-249; Greenberg & Palumbi 2012, 130. See also Section 2.6. Artefacts as active participants in social systems.
emulation or reinterpretation, rather than static definitions. These material correlates indicate the presence of interacting and overlapping sociocultural identities when reproduced continually within a particular context. Accordingly, the presence of RBBW/ KKW in combination with certain domestic structures, foodways and ritual elements, indicates the existence of a specific communal identity that is reminiscent of the KA homeland whilst also adopting and redefining elements of its material culture and practices through interaction with local populations throughout its dispersal\textsuperscript{309}.

The KA ‘cultural package’ was accordingly the result of interactions between peoples and material culture both in the ATC homeland and ‘diaspora’\textsuperscript{310}. Social difference in migrant societies is asserted by such ongoing renegotiation of tradition and overlap of social boundaries, which results in instances of cultural hybridisation whilst continuity is maintained in other elements to link the consumer with their community of origin in an act of ‘performative commemoration’. Furthermore, although certain cultural features initially indicate the presence of alternate or disparate identities within a community, gradual integration and hybridisation results in the loss of such distinction whereby markers of cultural identity are redefined or lose value as a measure of difference, as is seen with RBBW/ KKW\textsuperscript{311}.

Philip (1999) contends that the strong cultural associations and social value of RBBW/ KKW, andirons and other KA traits renders them unsuitable for trade or exchange, as the value of objects is ascribed by networks of meaning in the contexts in which they exist. However, although Philip is a proponent of the diffusionary spread of RBBW/ KKW, the highly distinctive nature of these objects and the effort taken to differentiate them from the local ceramic landscape indicates the presence of new groups of people, rather than emulation within an existing society as such elements of material culture would not hold value when entirely dislocated from the social systems that

\textsuperscript{310} Greenberg & Palumbi 2012, 112, 118.  
\textsuperscript{311} Bhabha 1994, 11-15; Batiuk & Rothman 2007, 7-8; Greenberg & Palumbi 2012, 127, 130.
imbue them with meaning\textsuperscript{312}. Instead, artefacts must be interpreted in accordance with the hermeneutic of the society in which they exist, and through which they are accorded value. Without the ascription of networks of meaning arising from specific socio-political and cultural circumstances, objects become ‘mute’ and cannot convey the information they encode\textsuperscript{313}. Accordingly, the migration of communities is the most plausible explanation for the dissemination of RBBW/ KKW and associated cultural features due to their persistent and distinct ideology, and initially segregatory distribution within non-ATC societies already possessing a local ceramic industry\textsuperscript{314}.

6.5. Conclusion

RBBW and KKW demonstrate extensive similarities, both aesthetically and in their manufacturing processes. Their handmade nature, striking colouration and relief or incised decoration, convey immediate visual resemblance. Furthermore, the use of compositionally variable local clays and avoidance of the potters’ wheel demonstrates a common ceramic tradition that is maintained temporally over a vast area. The recurring presence of andirons in close association with RBBW/ KKW demonstrates the domestic and ritual value of these ceramic forms to their consumers. Although some local variation is present as a result of interaction with local population groups, the fundamental morphological and stylistic basis of RBBW and KKW remains consistent, indicating an underlying communal ideology.

The evidence for trade or diffusion as a mechanism for widespread RBBW/ KKW distribution is limited to the Levantine discovery of specific artefacts of potentially ATC origin. Despite issues of differential preservation, the current nature of evidence indicates that exchange and flow of ideas was not constant and permeable enough to have facilitated the prevalent presence of RBBW/ KKW throughout the Levant. Instead, the discovery of wattle and daub architecture and KA funerary elements beyond ATC, and the manifestation of KKW as far south as Tell es-Sultan, indicates the large-scale movement of

\textsuperscript{312} Philip 1999, 43-44, 48.  
\textsuperscript{313} Hodder 1994, 1-2; Hodder 2000, 86-87.  
\textsuperscript{314} Dessel & Joffe 2000, 43.
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people, rather than just goods or ideas, particularly due to the initial cultural segregation within sites that eventually gives way to integration and hybridisation over time\textsuperscript{315}.

Furthermore, the immense social value accorded to RBBW/ KKW through its distinctive appearance, labour-intensive manufacturing process, and recurring manifestation in association with ritually significant andirons and coarse cookware, reflects the continual use of these artefacts by people to whom they held meaning. The preservation of this social value in the SL, over 2000 kilometres south of the ATC homeland, indicates the intentional perpetuation of a traditional communal identity\textsuperscript{316}. Accordingly, although the KA phenomenon is variable and should be analysed on a site-specific basis, this cultural tradition demonstrates vast geographic and temporal continuity through metallurgic, agricultural, domestic and ceramic activities, as well as great flexibility in the tendency to occupy advantageous social and economic niches as opportunities arose in the wider landscape\textsuperscript{317}.

\textsuperscript{315} Rothman 2015a, 9190.
\textsuperscript{316} Greenberg & Palumbi 2012, 127.
\textsuperscript{317} Palumbi 2008b, 324-325; Sagona 2011, 696; Batiuk 2013, 473; Rothman 2014, 67; Kibaroglu 2015, 223.
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7.1. Conclusions

The KKW ‘cultural package’ of red/black vessels, andirons and coarse local tradition cookware arrives in the EB III SL and disappears from this region by EB IV. Its domestic, handcrafted production contrasts with industrialised MW and the morphological standardisation of RSBW that arose from the potters’ wheel. The characteristic colouration and highly reflective, incised or relief decorated, surfaces of KKW are starkly different from the limited decoration of MW and RSBW. This labour- and time-intensive surface treatment process is in disjuncture with the substantially lesser importance accorded to the petrofabric makeup of KKW, which exhibits additional tempers and much compositional variability. Additionally, whilst the origins of MW and RSBW are found in the EB I-II SL, no viable antecedents for KKW occur in this region. These substantial divergences indicate the foreign nature of KKW in the SL.

KKW developed differentially according to the specific contexts in which it is found. At TBY it coexisted with the local ceramic industry, whilst at TBS indigenous pottery production eventually ceased due to the dominance of KKW. Despite this inter-site variability, KKW and andirons are overwhelmingly found within domestic contexts in an intertwinment of food and ritual practices centred on their roles as identity markers. This domestic manifestation strongly evokes the ATC KA tradition, typified by RBBW, anthropomorphic hearths, distinctive funerary practices and architectural features. The striking visual and technological similarity between RBBW and KKW, and the southward dispersion of RBBW/ KKW from ATC to the SL, highlights the mobility of the KA tradition. Owing to the currently scant nature of evidence for trade and diffusionary distribution mechanisms, and the endurance of KA cultural features centred on domestic life and ritual over more two millennia in the Near East, migration is the most plausible explanation for this phenomenon. Pierced lugs on pots, the presence of model wagon wheels, and the andiron, a portable version of permanent hearths in
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ATC dwellings, are indicative of KA mobility. The current migratory theory is more nuanced than the traditional culture-historical ‘pots to people’ trope through its holistic focus on recurring material correlates, which indicate the movement of peoples who adopted certain aspects of their new societies whilst maintaining elements of KA communal identity through ceramic manufacture, and reproduction of domestic and ritual practice.

Over time, the loss of ceramic distinctiveness occurred through increasing contact and integration with local population groups, which reduced the need for RBBW/ KKW producers and consumers to emphasise a variable and distinct identity. This is seen in the production of hybrid vessel forms. Accordingly, the KKW phenomenon and its close connection with RBBW of ATC has been interpreted in a holistic, situational manner that corresponds with its manifestation, as arising from inter-group interaction. When considered as a ‘text’, KKW and associated artefactual evidence provide insight into the construction of material culture and how it is ascribed with meaning. It further demonstrates how objects can differentially interact with people to form connotations that can be properly understood only when interpreted through the hermeneutic system in which they are embedded. The adoption of such an approach is crucial to deciphering the identities of past peoples and the principles that structured their lives. The KKW case study is well suited to considering such questions of identity and ethnicity through its endurance of cultural distinctiveness as an extension of the KA tradition and its widespread propagation, which fostered interaction with populations who espoused variable practices, ideologies and material culture.318 Such inter- and intra-group communication, and its material manifestations, are at the core of studies into archaeological ethnicity and identity.

7.2. Future Directions

Pottery is central to investigations of the EBA SL due to its ubiquity and the information it encodes about technological knowledge, behaviours, values and

identities of those with whom it interacts\textsuperscript{319}. However, despite this, the significant emphasis placed on typological and decorative features of KKW in previous studies has often occurred at the expense of considering broader contexts in which the ware is situated\textsuperscript{320}. Further research into the KKW phenomenon should focus on the socioeconomic circumstances of those engaged in producing and consuming this ware, taking into account zooarchaeological, botanical and other such evidence to gain insight into the lives of those Woolley (1953) called the ‘Khirbet Kerak people’\textsuperscript{321}. This holism is necessary to make inferences about the behaviour, practices and ideologies of those engaging with KKW, which should be compared to the material culture and corresponding interpretations from sites with RBBW in ATC, and along migration routes to the SL\textsuperscript{322}. Further work towards establishing a clearer absolute and relative chronology of the EBA SL and KKW sherds is also essential to this contextual approach\textsuperscript{323}.

Additionally, although this study has highlighted migration as the key form of social agency in the dissemination of RBBW/ KKW, the factors that contributed to these population movements require further investigation\textsuperscript{324}. Deeper exploration of the nuanced socio-political environment of ATC and its impact on local populations will counteract the existing lack of in-depth and proportionate research into the KA dispersal by providing insight into the motivations for KA mobility across vast and widely disparate geographical regions, which brought peoples engaged with this tradition into contact with different groups\textsuperscript{325}. Examination of ethnographic studies of pastoral nomads and villagers in the ATC region, in conjunction with archaeological evidence, may also provide observations that are often not perceptible in the material record alone\textsuperscript{326}. However, ethnographic approaches must be employed with caution, as direct historical continuity cannot be assumed\textsuperscript{327}. Consideration of

\textsuperscript{319} Iserlis 2009, 182.
\textsuperscript{320} Philip 2001, 203.
\textsuperscript{321} Woolley 1953, 31-33; Greenberg & Goren 2009, 130.
\textsuperscript{322} Paz 2009, 213.
\textsuperscript{324} Dessel & Joffe 2000, 43.
\textsuperscript{325} Palumbi & Chaitaigner 2014, 257; Isikli 2015, 244.
\textsuperscript{326} Beck 2008, 1159; Yakar 2015, 326-330.
\textsuperscript{327} Kramer 1979, 2; Hamilakis 2011, 399-404.
broader issues regarding contexts from which producers and consumers of RBBW/ KKW originated will enable better understanding of their identities and the intended or perceived meanings encompassed within their pottery\textsuperscript{328}.

In addition, it is essential that existing notions of identity and ethnicity within archaeology continue to be challenged and reconceptualised in order to encourage transparency and openness\textsuperscript{329}. Ethnicity is a nuanced and multifaceted concept that is constructed through subjective self-definition on the basis of sociocultural traits that groups view as intrinsic to a specific way of life or being, and which are informed by their wider context\textsuperscript{330}. Accordingly, studies of ethnicity and other sociocultural identities must also adopt such an approach, taking into consideration broad factors that influence the manner in which peoples view themselves and others who demonstrate differing or opposing traits and behaviours\textsuperscript{331}. When studying the material record, individual artefacts must be considered as facets of the larger sociocultural system in which they are embedded and imbued with meaning. Holistic and contextualised case-based studies that aim to interpret interactions between artefacts and peoples in their wider hermeneutic frameworks, and which espouse self-reflexivity in considering the contexts and biases of the researcher, are accordingly imperative to future research into ethnicity and identity in archaeology\textsuperscript{332}.

\textsuperscript{328} Costin 1998, 6.
\textsuperscript{330} Olsen & Kobyliński 1995, 7-12; Jones 1997, 72-73; Baltes 2001, 4826.
\textsuperscript{332} Buchli 1995, 183-187; Criado 1995, 196; Ross 2012, 39.


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